

# Entering 5th Grade Summer Math Work



WCS

Name: \_\_\_\_\_

Dear Families,

It is so important for children to keep learning over the summer! Research shows that students can lose up to 2.6 months of math learning during the summer months. Research also shows that just 2 hours of work each week in math can help prevent this summer learning loss. The work in this packet has been designed to review last year's learned math skills and prepare your child for success in math this year. This will also be your child's first math grade of the year and you will need to send it to school when we return in the fall.

In this packet, you will find about 10 weeks of work, with 1-2 hours of work each week. We suggest you create a schedule that works for your family each week. Maybe you spend 15-30 minutes in the mornings working on this math work each day or maybe your child completes it all on Sunday evenings-- whatever works for you. Please do try to spread it over 10 weeks- don't try to do it all the last week of summer!

Happy summer!



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# Multi-Digit Addition Review

1 Solve the problems below. Show all your work.

$$\begin{array}{r} 120 \\ + 207 \\ \hline \end{array}$$

$$\begin{array}{r} 459 \\ + 320 \\ \hline \end{array}$$

$$\begin{array}{r} 533 \\ + 429 \\ \hline \end{array}$$

$$\begin{array}{r} 332 \\ + 845 \\ \hline \end{array}$$

$$\begin{array}{r} 457 \\ + 372 \\ \hline \end{array}$$

$$\begin{array}{r} 538 \\ + 975 \\ \hline \end{array}$$

$$\begin{array}{r} 347 \\ 576 \\ + 423 \\ \hline \end{array}$$

$$\begin{array}{r} 1,438 \\ 2,754 \\ + 3,626 \\ \hline \end{array}$$

2 Rewrite these problems in vertical form. Then solve them. Show all your work.

**example**  $583 + 645$

$$\begin{array}{r} 1 \\ 583 \\ + 645 \\ \hline 1,228 \end{array}$$

**a**  $276 + 986$

**b**  $362 + 1,534$



## CHALLENGE

3 Use two numbers from the box to complete each addition problem below. You will use some numbers more than once.

97	204	297	405	498	607
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$$\begin{array}{r} \boxed{\phantom{000}} \\ + \boxed{\phantom{000}} \\ \hline 3 \ 0 \ 1 \end{array}$$

$$\begin{array}{r} \boxed{\phantom{000}} \\ + \boxed{\phantom{000}} \\ \hline 3 \ 9 \ 4 \end{array}$$

$$\begin{array}{r} \boxed{\phantom{000}} \\ + \boxed{\phantom{000}} \\ \hline 1, \ 0 \ 1 \ 2 \end{array}$$

$$\begin{array}{r} \boxed{\phantom{000}} \\ + \boxed{\phantom{000}} \\ \hline 1, \ 1 \ 0 \ 5 \end{array}$$

$$\begin{array}{r} \boxed{\phantom{000}} \\ + \boxed{\phantom{000}} \\ \hline 7 \ 0 \ 2 \end{array}$$

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# Multi-Digit Subtraction Review

1 Solve the problems below. Show all your work.

$$\begin{array}{r} 649 \\ - 514 \\ \hline \end{array}$$

$$\begin{array}{r} 2,964 \\ - 723 \\ \hline \end{array}$$

$$\begin{array}{r} 482 \\ - 391 \\ \hline \end{array}$$

$$\begin{array}{r} 3,851 \\ - 1,470 \\ \hline \end{array}$$

$$\begin{array}{r} 4,582 \\ - 950 \\ \hline \end{array}$$

$$\begin{array}{r} 6,739 \\ - 547 \\ \hline \end{array}$$

$$\begin{array}{r} 385 \\ - 197 \\ \hline \end{array}$$

$$\begin{array}{r} 7,846 \\ - 4,928 \\ \hline \end{array}$$

2 Rewrite these problems in vertical form. Solve them and then add the numbers to check your answer. Show all your work.

**example**  $906 - 458$

$$\begin{array}{r} 89 \\ 906 \\ - 458 \\ \hline 448 \end{array} \quad \begin{array}{r} 11 \\ 458 \\ + 448 \\ \hline 906 \end{array}$$

**a**  $607 - 569$

**b**  $8,046 - 753$



## CHALLENGE

3 Complete these problems. There is more than one correct solution to the first two problems.

**a**

$$\begin{array}{r} \square 0 1 \\ - \square \square \\ \hline \square 6 7 \end{array}$$

**b**

$$\begin{array}{r} \square 7 \square \\ - \square \square 2 \\ \hline 3 \square \square \end{array}$$

**c**

$$\begin{array}{r} 8 6 \square \\ - \square 4 1 \\ \hline 5 1 \square \end{array}$$

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# Add, Subtract & Multiply

1 Solve the addition and subtraction problems below. Show all your work.

$$\begin{array}{r} \$1.74 \\ + \$2.25 \\ \hline \end{array}$$

$$\begin{array}{r} \$20.71 \\ + \$6.55 \\ \hline \end{array}$$

$$\begin{array}{r} \$43.53 \\ + \$7.18 \\ \hline \end{array}$$

$$\begin{array}{r} \$8.14 \\ + \$7.03 \\ \hline \end{array}$$

$$\begin{array}{r} \$5.32 \\ - \$2.81 \\ \hline \end{array}$$

$$\begin{array}{r} \$3.42 \\ - \$1.84 \\ \hline \end{array}$$

$$\begin{array}{r} \$54.66 \\ - \$6.93 \\ \hline \end{array}$$

$$\begin{array}{r} \$3.04 \\ - \$1.26 \\ \hline \end{array}$$

2 Rewrite these problems in vertical form. Then solve them. Show all your work.

<b>example</b> $\$2.96 + \$8.45$ $\begin{array}{r} \$2.96 \\ + \$8.45 \\ \hline \$11.41 \end{array}$	<b>a</b> $\$4.72 + \$2.39$	<b>b</b> $\$506.00 - \$3.57$
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3 Complete these multiplication problems.

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 10 \\ \hline \end{array}$$

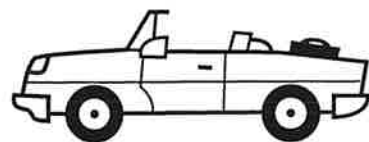
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# Miles, Books & Jellybeans

Solve the problems below. Show all your work.

**1** Felipe's family is driving to see his grandmother. Altogether, they have to drive 856 miles. If they have gone 269 miles so far, how much farther do they have to drive?



**2** In our classroom library, we had 326 books. We gave 38 books to the other fourth grade classroom, but our teacher got 97 more books for our classroom library. How many books do we have in our classroom library now?



## CHALLENGE

**3** At the school fair, students were guessing how many jellybeans were in a jar. Nicky guessed there were 296 jellybeans. Caitlyn guessed there were 435 jellybeans. Samira guessed a number that was 52 more than Nicky and Caitlyn's put together. What was Samira's guess?



**A**

Correct: \_\_\_\_\_

Multiply.

1	$3 \times 0 =$	23	$8 \times 5 =$
2	$4 \times 0 =$	24	$8 \times 4 =$
3	$7 \times 0 =$	25	$3 \times 10 =$
4	$8 \times 0 =$	26	$3 \times 9 =$
5	$3 \times 1 =$	27	$3 \times 8 =$
6	$4 \times 1 =$	28	$4 \times 10 =$
7	$7 \times 1 =$	29	$4 \times 9 =$
8	$8 \times 1 =$	30	$4 \times 8 =$
9	$3 \times 2 =$	31	$8 \times 10 =$
10	$3 \times 3 =$	32	$8 \times 9 =$
11	$4 \times 2 =$	33	$8 \times 8 =$
12	$4 \times 3 =$	34	$7 \times 10 =$
13	$8 \times 2 =$	35	$7 \times 9 =$
14	$8 \times 3 =$	36	$7 \times 8 =$
15	$7 \times 2 =$	37	$3 \times 6 =$
16	$7 \times 3 =$	38	$4 \times 7 =$
17	$4 \times 5 =$	39	$7 \times 6 =$
18	$4 \times 4 =$	40	$8 \times 7 =$
19	$3 \times 5 =$	41	$3 \times 7 =$
20	$3 \times 4 =$	42	$4 \times 6 =$
21	$7 \times 5 =$	43	$7 \times 7 =$
22	$7 \times 4 =$	44	$8 \times 6 =$

**B**

Improvement: \_\_\_\_\_

Correct: \_\_\_\_\_

Multiply.

1	$4 \times 0 =$	23	$7 \times 5 =$
2	$3 \times 0 =$	24	$7 \times 4 =$
3	$8 \times 0 =$	25	$4 \times 10 =$
4	$7 \times 0 =$	26	$4 \times 9 =$
5	$4 \times 1 =$	27	$4 \times 8 =$
6	$3 \times 1 =$	28	$3 \times 10 =$
7	$8 \times 1 =$	29	$3 \times 9 =$
8	$7 \times 1 =$	30	$3 \times 8 =$
9	$4 \times 2 =$	31	$7 \times 10 =$
10	$4 \times 3 =$	32	$7 \times 9 =$
11	$3 \times 2 =$	33	$7 \times 8 =$
12	$3 \times 3 =$	34	$8 \times 10 =$
13	$7 \times 2 =$	35	$8 \times 9 =$
14	$7 \times 3 =$	36	$8 \times 8 =$
15	$8 \times 2 =$	37	$4 \times 6 =$
16	$8 \times 3 =$	38	$3 \times 7 =$
17	$3 \times 5 =$	39	$8 \times 6 =$
18	$3 \times 4 =$	40	$7 \times 7 =$
19	$4 \times 5 =$	41	$4 \times 7 =$
20	$4 \times 4 =$	42	$3 \times 6 =$
21	$8 \times 5 =$	43	$8 \times 7 =$
22	$8 \times 4 =$	44	$7 \times 6 =$

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# Multiples & Multiplication Facts

**1** When you count by a number, you are naming the multiples of that number. For example, if you skip count by 5's, you are naming the multiples of five: 5, 10, 15, 20, 25, and so on. In each sequence below, fill in the missing multiples.

<b>ex</b> 5, 10, 15, <u>20</u> , 25, 30, <u>35</u>	<b>a</b> 3, 6, _____, 12, 15, 18, _____, 24
<b>b</b> 6, _____, 18, _____, 30	<b>c</b> 9, 18, _____, 36, 45, _____, 63

**2** Circle all the multiples of the number in each box.

<b>ex</b> 5	16	<u>20</u>	<u>15</u>	42	36	<u>45</u>	18	<b>a</b> 2	5	6	7	8	14	21	10
<b>b</b> 4	8	6	14	16	20	28	19	<b>c</b> 7	22	33	21	14	16	42	35
<b>d</b> 8	28	32	48	16	60	72	19	<b>e</b> 3	21	35	18	36	44	12	29

**3** Fill in the missing numbers.

$$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times \square \\ \hline 24 \end{array}$$

$$\begin{array}{r} 7 \\ \times \square \\ \hline 14 \end{array}$$

$$\begin{array}{r} \square \\ \times 5 \\ \hline 30 \end{array}$$

$$\begin{array}{r} \square \\ \times 4 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 3 \\ \times \square \\ \hline 12 \end{array}$$



## CHALLENGE

$$\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 16 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 32 \\ \hline \end{array}$$

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# Arrays & Factors

**1** Draw and label a rectangular array to show two factors for each number. Do not use 1 as one of your factors. Then write the fact family that goes with your array.

<p><b>example 8</b></p> <div style="text-align: center;"> <p>4</p> </div> $\begin{array}{rcl} 2 & \times & 4 = 8 \\ 4 & \times & 2 = 8 \\ 8 & \div & 4 = 2 \\ 8 & \div & 2 = 4 \end{array}$	<p><b>a 16</b></p> $\begin{array}{rcl} \_\_\_\_\_\_ & \times & \_\_\_\_\_\_ = \_\_\_\_\_\_ \\ \_\_\_\_\_\_ & \times & \_\_\_\_\_\_ = \_\_\_\_\_\_ \\ \_\_\_\_\_\_ & \div & \_\_\_\_\_\_ = \_\_\_\_\_\_ \\ \_\_\_\_\_\_ & \div & \_\_\_\_\_\_ = \_\_\_\_\_\_ \end{array}$	<p><b>b 18</b></p> $\begin{array}{rcl} \_\_\_\_\_\_ & \times & \_\_\_\_\_\_ = \_\_\_\_\_\_ \\ \_\_\_\_\_\_ & \times & \_\_\_\_\_\_ = \_\_\_\_\_\_ \\ \_\_\_\_\_\_ & \div & \_\_\_\_\_\_ = \_\_\_\_\_\_ \\ \_\_\_\_\_\_ & \div & \_\_\_\_\_\_ = \_\_\_\_\_\_ \end{array}$
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**2** List all the factors of each number below.

<b>ex</b> 12	1, 2, 3, 4, 6, 12	<b>a</b> 16	
<b>b</b> 17		<b>c</b> 24	
<b>d</b> 9		<b>e</b> 36	

**3a** Circle the prime number(s) in problem 2.

**b** Draw a square around the square number(s) in problem 2.



## CHALLENGE

**4** Fill in the missing digits in the problems below.

**example**

$$\begin{array}{r} 78 \overline{) 134} \\ - 69 \overline{) 3} \\ \hline 141 \end{array}$$

**a**

$$\begin{array}{r} 3 \square 6 \\ + \square 9 \square \\ \hline 704 \end{array}$$

**b**

$$\begin{array}{r} 623 \\ - \square 4 \square \\ \hline 1 \square 7 \end{array}$$

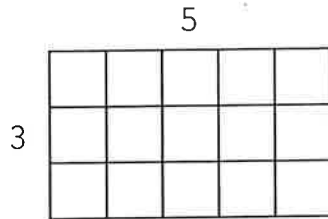
NAME \_\_\_\_\_

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# Area & Perimeter

**1** Find the area and perimeter of each rectangle. Area is the total amount of space covered by the rectangle. Perimeter is the distance around the rectangle.

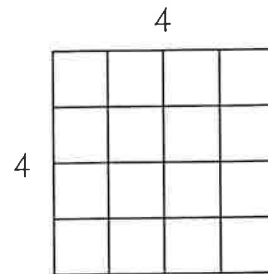
**example**



Perimeter  $3 + 3 + 5 + 5 = 16$  units

Area  $3 \times 5 = 15$  square units

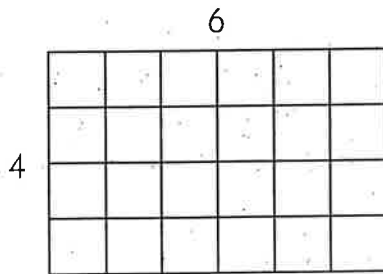
**a**



Perimeter \_\_\_\_\_

Area \_\_\_\_\_

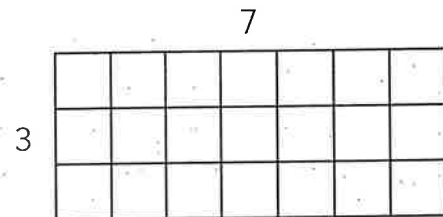
**b**



Perimeter \_\_\_\_\_

Area \_\_\_\_\_

**c**



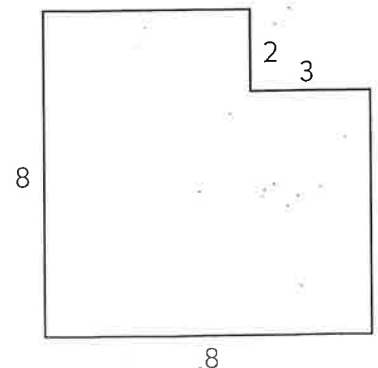
Perimeter \_\_\_\_\_

Area \_\_\_\_\_



## CHALLENGE

**2** Find the area and perimeter of this shape. Show all your work.



Perimeter \_\_\_\_\_

Area \_\_\_\_\_

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# Place Value & Perimeter

1 Write each number below in standard form.

**example** twenty-three thousand, five hundred six 23,506

**a** nine thousand, two hundred forty-eight \_\_\_\_\_

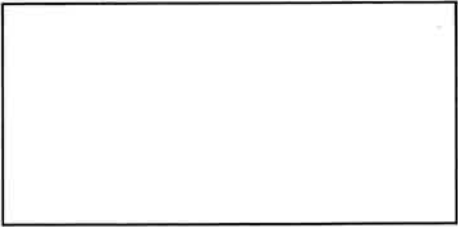


**b** seventeen thousand, six hundred thirty-three \_\_\_\_\_

**c** thirty-two thousand, fifty-eight \_\_\_\_\_

2 Identify the place value and value of the underlined digit in each number.

Number	Place Value	Value
<b>ex</b> 3 <u>6</u> ,874	thousands	six thousand
<b>a</b> 17, <u>6</u> 04		
<b>b</b> 8, <u>0</u> 97		
<b>c</b> <u>4</u> 1,000		

3 Find the perimeter of each rectangle below. Show your work.

<p><b>example</b> Perimeter <u>1,726"</u></p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>583"</p>  <p>280"</p> </div> <div> <math display="block">\begin{array}{r} 1 \\ 280'' \\ + 280'' \\ \hline 560'' \end{array}</math> <math display="block">\begin{array}{r} 1 \\ 583'' \\ + 583'' \\ \hline 1,166'' \end{array}</math> <math display="block">\begin{array}{r} 1 \\ 1,166'' \\ + 560'' \\ \hline 1,726'' \end{array}</math> </div> </div>		
<p><b>a</b> Perimeter _____</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>126"</p>  <p>234"</p> </div> </div>	<p><b>b</b> Perimeter _____</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>196"</p>  <p>285"</p> </div> </div>	

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# Multiplication & Division Practice

1 Solve the following multiplication and division problems.

$$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 4 \\ \hline \end{array}$$

$32 \div 4 = \underline{\quad}$

$20 \div 5 = \underline{\quad}$

$16 \div 8 = \underline{\quad}$

$24 \div 3 = \underline{\quad}$

$24 \div 4 = \underline{\quad}$

$15 \div 3 = \underline{\quad}$

$40 \div 5 = \underline{\quad}$

$36 \div 6 = \underline{\quad}$

2 Fill in the missing numbers.

$$\begin{array}{r} 9 \\ \times 7 \\ \hline \square \end{array}$$

$$\begin{array}{r} 3 \\ \times 0 \\ \hline \square \end{array}$$

$$\begin{array}{r} 7 \\ \times 7 \\ \hline \square \end{array}$$

$$\begin{array}{r} 1 \\ \times 5 \\ \hline \square \end{array}$$

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \square \end{array}$$

$$\begin{array}{r} 7 \\ \times \square \\ \hline 42 \end{array}$$

$$\begin{array}{r} 5 \\ \times \square \\ \hline 40 \end{array}$$

$$\begin{array}{r} \square \\ \times 8 \\ \hline 64 \end{array}$$

$$\begin{array}{r} \square \\ \times 4 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 3 \\ \times \square \\ \hline 18 \end{array}$$

3 Solve the following multiplication problems.

$$\begin{array}{r} 4 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 100 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 1,000 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 100 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 1,000 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 100 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 1,000 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 100 \\ \hline \end{array}$$

$$\begin{array}{r} 0 \\ \times 1,000 \\ \hline \end{array}$$



## CHALLENGE

4 Fill in the missing numbers.

$300 \div \underline{\quad} = 3$

$8,000 \div \underline{\quad} = 1,000$

$40 \div \underline{\quad} = 4$

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# Expanded Notation & Fact Families

1 Complete each equation by writing a number in standard form.

<b>ex</b> $17,508 = 10,000 + 7,000 + 500 + 8$	<b>a</b> _____ = $20,000 + 400 + 50 + 6$
<b>b</b> _____ = $30,000 + 2,000 + 100 + 10 + 2$	<b>c</b> _____ = $7,000 + 40 + 6$
<b>d</b> _____ = $90,000 + 6,000 + 30 + 5$	<b>e</b> _____ = $60,000 + 3,000 + 7$
<b>f</b> _____ = $10,000 + 3,000 + 800 + 50 + 5$	<b>g</b> _____ = $50,000 + 300 + 5$

2 Fill in the missing number in each equation.

<b>ex</b> $40,000 + 6,000 + \underline{50} + 8 = 46,058$	<b>a</b> $41,092 = 40,000 + \underline{\hspace{1cm}} + 90 + 2$
<b>b</b> $50,000 + 1,000 + \underline{\hspace{1cm}} + 50 + 4 = 51,354$	<b>c</b> $17,035 = 10,000 + \underline{\hspace{1cm}} + 30 + 5$
<b>d</b> $96,035 = 90,000 + 6,000 + \underline{\hspace{1cm}} + 5$	<b>e</b> $20,000 + \underline{\hspace{1cm}} + 50 + 6 = 20,456$
<b>f</b> $2,000 + 500 + \underline{\hspace{1cm}} + 7 = 2,567$	<b>g</b> $20,408 = 20,000 + \underline{\hspace{1cm}} + 8$

3 Fill in the missing information for each rectangle. Then write the multiplication and division fact family that goes with the rectangle.

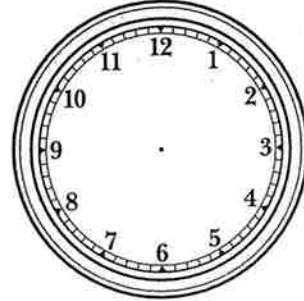
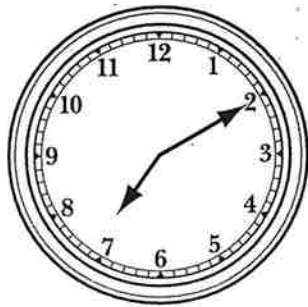
<b>example</b> <div style="text-align: center;"> <math>\begin{array}{c} 4 \\ 2 \overline{) 8} \end{array}</math> </div> $\begin{array}{rcl} \underline{2} & \times & \underline{4} = \underline{8} \\ \underline{4} & \times & \underline{2} = \underline{8} \\ \underline{8} & \div & \underline{4} = \underline{2} \\ \underline{8} & \div & \underline{2} = \underline{4} \end{array}$	<b>a</b> <div style="text-align: center;"> <math>\begin{array}{c} \underline{\hspace{1cm}} \\ 3 \overline{) 21} \end{array}</math> </div> $\begin{array}{rcl} \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \end{array}$	<b>b</b> <div style="text-align: center;"> <math>\begin{array}{c} 9 \\ \underline{\hspace{1cm}} \overline{) 54} \end{array}</math> </div> $\begin{array}{rcl} \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \times & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \\ \underline{\hspace{1cm}} & \div & \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \end{array}$
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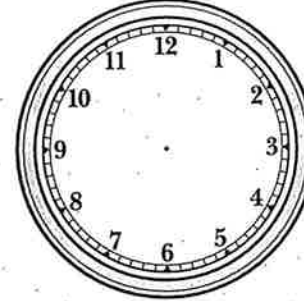
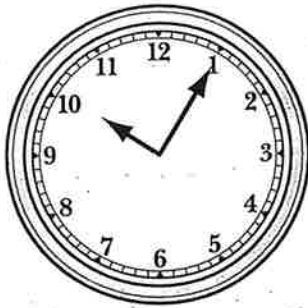
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## Time after Time

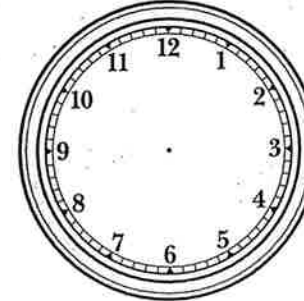
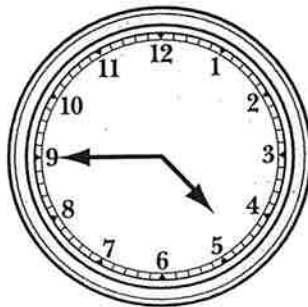
- 1 Show what time it would be 25 minutes after the time on the first clock.



- 2 Show what time it would be 15 minutes before the time shown on the first clock.

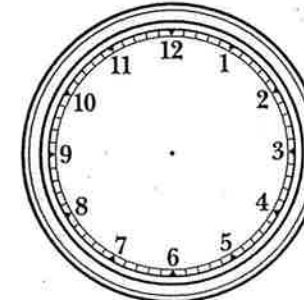
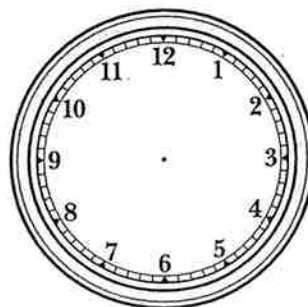


- 3 Show what time it would be 35 minutes after the time shown on the first clock.



### CHALLENGE

- 4 Show two times that are 85 minutes apart.



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# Number Riddles

1 Draw a line to show which number matches each description. The first one is done for you.

<b>example</b> This number has a 2 in the thousands place.	46,305
<b>a</b> This is an even number with a 6 in the hundreds place.	32,617
<b>b</b> This number is equal to $30,000 + 4,000 + 80 + 2$ .	45,052
<b>c</b> This number is 1000 less than 46,052.	19,628
<b>d</b> This is an odd number with a 6 in the thousands place.	34,082

2 Write each number in words.

<b>example</b> 17,329	seventeen thousand, three hundred twenty-nine
<b>a</b> 33,072	
<b>b</b> 86,105	
<b>c</b> 74,629	



## CHALLENGE







3 Write an even number that has a 7 in the hundreds place, has an odd number in the thousands place, and is a multiple of 10.

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# Counting Coins & Bills

1 Write each money amount in decimal form. You can draw loops around groups of coins that make it easier for you to find the total amount.

<p><b>ex</b> <u>\$0.37</u></p> 	<p><b>a</b> _____</p> 	<p><b>b</b> _____</p> 
<p><b>c</b> _____</p> 	<p><b>d</b> _____</p> 	<p><b>e</b> _____</p> 

2 Write each money amount in decimal form.

**example** 1 dollar bill, 5 quarters, 3 pennies

\$2.28

**a** 3 dollar bills, 9 nickels, 2 pennies

**b** 6 quarters, 2 dimes, 4 pennies

**c** 3 quarters, 6 nickels, 7 pennies

**d** 4 dollar bills, 3 half dollars, 7 nickels

**e** 2 dollar bills, 7 quarters, 16 pennies



## CHALLENGE

**f** 12 quarters, 80 nickels, 97 pennies

**g** 24 quarters, 140 nickels, 30 dimes, 45 pennies

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## How Much Change?

1 Sharon bought a bottle of iced tea that cost \$1.65. She paid for it with a \$5 bill. How much change did she get back? Show all your work.

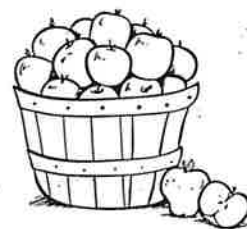


2 Toshi bought a magazine that cost \$3.89. He paid for it with a \$10 bill. How much change did he get back? Show all your work.



### CHALLENGE

3 Apples are on sale for 99¢ per pound. Mr. James bought 6 pounds of apples and paid for them with a \$10 bill. How much change did he get back? Show all your work.



**A**

Correct: \_\_\_\_\_

Solve for k.

1	$2 \div 2 = k$	$k =$	23	$15 \div 3 = k$	$k =$
2	$4 \div 2 = k$	$k =$	24	$30 \div 3 = k$	$k =$
3	$6 \div 2 = k$	$k =$	25	$k = 10 \div 2$	$k =$
4	$8 \div 2 = k$	$k =$	26	$k = 25 \div 5$	$k =$
5	$20 \div 2 = k$	$k =$	27	$16 \div 4 = k$	$k =$
6	$k = 20 \div 10$	$k =$	28	$12 \div 3 = k$	$k =$
7	$5 \div 5 = k$	$k =$	29	$k = 14 \div 2$	$k =$
8	$10 \div 5 = k$	$k =$	30	$k = 18 \div 2$	$k =$
9	$15 \div 5 = k$	$k =$	31	$12 \div 2 = k$	$k =$
10	$20 \div 5 = k$	$k =$	32	$16 \div 2 = k$	$k =$
11	$50 \div 5 = k$	$k =$	33	$35 \div 5 = k$	$k =$
12	$k = 50 \div 10$	$k =$	34	$k = 18 \div 3$	$k =$
13	$4 \div 4 = k$	$k =$	35	$24 \div 3 = k$	$k =$
14	$8 \div 4 = k$	$k =$	36	$k = 45 \div 5$	$k =$
15	$12 \div 4 = k$	$k =$	37	$24 \div 4 = k$	$k =$
16	$20 \div 4 = k$	$k =$	38	$k = 32 \div 4$	$k =$
17	$40 \div 4 = k$	$k =$	39	$40 \div 5 = k$	$k =$
18	$k = 40 \div 10$	$k =$	40	$k = 21 \div 3$	$k =$
19	$30 \div 10 = k$	$k =$	41	$27 \div 3 = k$	$k =$
20	$3 \div 3 = k$	$k =$	42	$k = 30 \div 5$	$k =$
21	$6 \div 3 = k$	$k =$	43	$28 \div 4 = k$	$k =$
22	$9 \div 3 = k$	$k =$	44	$k = 36 \div 4$	$k =$

**B**

Improvement: \_\_\_\_\_

Correct: \_\_\_\_\_

Solve for k.

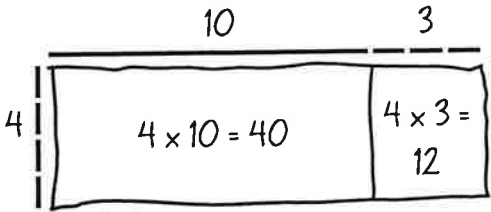


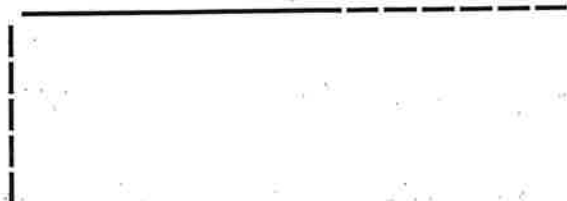
1	$5 \div 5 = k$	$k =$	23	$20 \div 4 = k$	$k =$
2	$10 \div 5 = k$	$k =$	24	$40 \div 4 = k$	$k =$
3	$15 \div 5 = k$	$k =$	25	$k = 25 \div 5$	$k =$
4	$20 \div 5 = k$	$k =$	26	$k = 10 \div 2$	$k =$
5	$50 \div 5 = k$	$k =$	27	$12 \div 3 = k$	$k =$
6	$k = 50 \div 10$	$k =$	28	$16 \div 4 = k$	$k =$
7	$2 \div 2 = k$	$k =$	29	$k = 12 \div 2$	$k =$
8	$4 \div 2 = k$	$k =$	30	$k = 16 \div 2$	$k =$
9	$6 \div 2 = k$	$k =$	31	$14 \div 2 = k$	$k =$
10	$8 \div 2 = k$	$k =$	32	$18 \div 2 = k$	$k =$
11	$20 \div 2 = k$	$k =$	33	$45 \div 5 = k$	$k =$
12	$k = 20 \div 10$	$k =$	34	$k = 21 \div 3$	$k =$
13	$3 \div 3 = k$	$k =$	35	$27 \div 3 = k$	$k =$
14	$6 \div 3 = k$	$k =$	36	$k = 35 \div 5$	$k =$
15	$9 \div 3 = k$	$k =$	37	$28 \div 4 = k$	$k =$
16	$12 \div 3 = k$	$k =$	38	$k = 36 \div 4$	$k =$
17	$30 \div 3 = k$	$k =$	39	$30 \div 5 = k$	$k =$
18	$k = 30 \div 10$	$k =$	40	$k = 18 \div 3$	$k =$
19	$40 \div 10 = k$	$k =$	41	$24 \div 3 = k$	$k =$
20	$4 \div 4 = k$	$k =$	42	$k = 40 \div 5$	$k =$
21	$8 \div 4 = k$	$k =$	43	$24 \div 4 = k$	$k =$
22	$12 \div 4 = k$	$k =$	44	$k = 32 \div 4$	$k =$

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# Fill the Frames

Label each array frame below. Then fill it in with labeled rectangles. Write an addition equation to show how you got the total. Then write a multiplication equation to match the array.

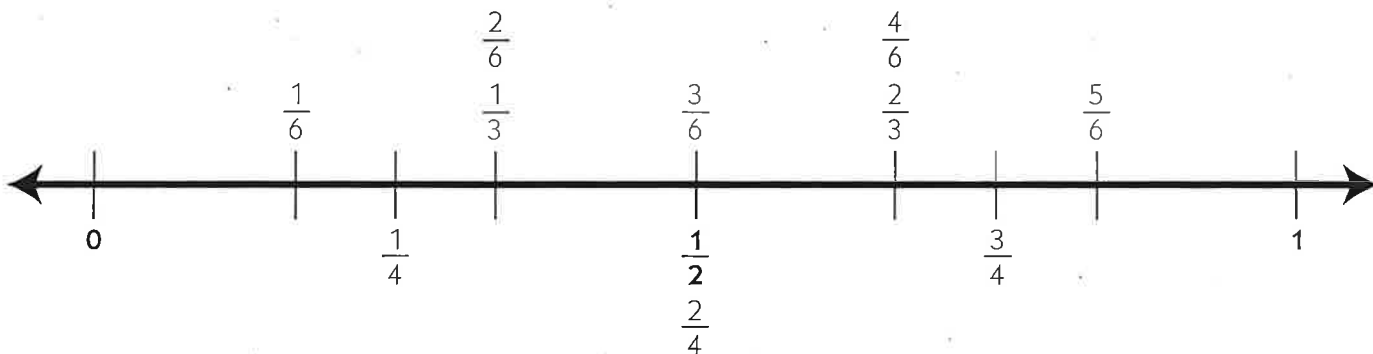
Labeled Array Frame & Rectangle	Addition Equation	Multiplication Equation
<b>example</b> 	$40 + 12 = 52$	$4 \times 13 = 52$
<b>1</b> 		
<b>2</b> 		
<b>3</b> 		

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# Comparing Fractions on a Number Line

When you are comparing fractions, it can help to think about how close those fractions are to landmarks like one whole and one-half. Use the number line to help complete the problems below.



1 Complete the table.

Circle the fraction that is greater than $\frac{1}{2}$ .	Write a number sentence showing which fraction is greater.
<b>example</b> $\frac{4}{6}$ $\frac{1}{4}$	$\frac{4}{6} > \frac{1}{4}$
<b>a</b> $\frac{2}{6}$ $\frac{2}{3}$	
<b>b</b> $\frac{1}{3}$ $\frac{5}{6}$	

2 Complete the table.

Circle the fraction that is closest to 1.	Write a number sentence showing which fraction is greater.
<b>a</b> $\frac{3}{4}$ $\frac{2}{3}$	
<b>b</b> $\frac{5}{6}$ $\frac{2}{3}$	
<b>c</b> $\frac{3}{4}$ $\frac{5}{6}$	

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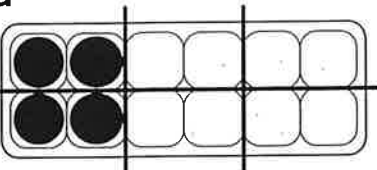
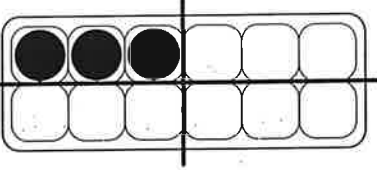
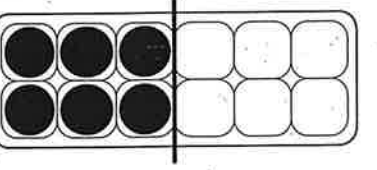
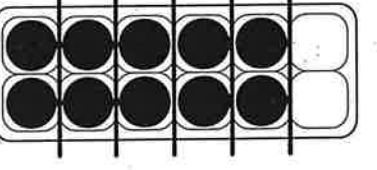
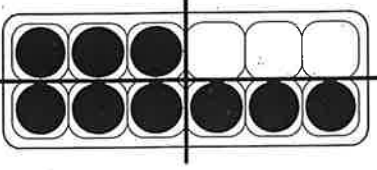
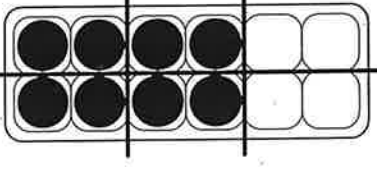
# Egg Carton Fractions

**1** Solve the following multiplication and division problems. They might help you think about the egg cartons in problem 2.

$12 \div 2 = \underline{\hspace{2cm}} \quad 12 \div 3 = \underline{\hspace{2cm}} \quad 12 \div 4 = \underline{\hspace{2cm}} \quad 12 \div 6 = \underline{\hspace{2cm}}$

$6 \times 3 = \underline{\hspace{2cm}} \quad 4 \times 2 = \underline{\hspace{2cm}} \quad 3 \times 3 = \underline{\hspace{2cm}} \quad 2 \times 5 = \underline{\hspace{2cm}}$

**2** Write a fraction to show the amount of each egg carton that is filled with eggs. The cartons are divided into equal parts for you.

<b>a</b>  _____	<b>b</b>  _____
<b>c</b>  _____	<b>d</b>  _____
<b>e</b>  _____	<b>f</b>  _____

**3** Write greater than ( $>$ ) or less than ( $<$ ) to show which fraction is greater. If they are equal, write an equal sign ( $=$ ).

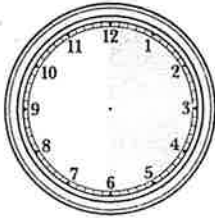
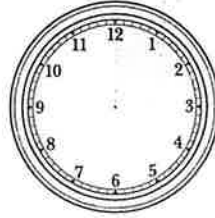
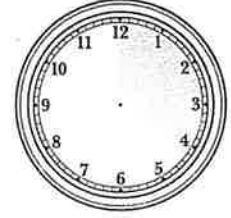
<b>ex a</b> $\frac{1}{4} < \frac{1}{2}$	<b>ex b</b> $\frac{1}{2} > \frac{1}{3}$	<b>a</b> $\frac{4}{6}$ $\frac{2}{3}$
<b>b</b> $\frac{1}{3}$ $\frac{1}{4}$	<b>c</b> $\frac{3}{4}$ $\frac{5}{6}$	<b>d</b> $\frac{1}{3}$ $\frac{3}{4}$
<b>e</b> $\frac{1}{2}$ $\frac{2}{4}$	<b>f</b> $\frac{2}{3}$ $\frac{3}{4}$	<b>g</b> $\frac{2}{6}$ $\frac{1}{3}$

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# Clock Fractions

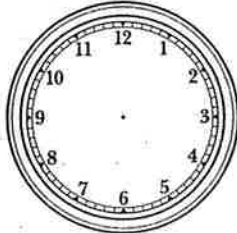
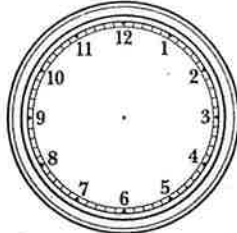
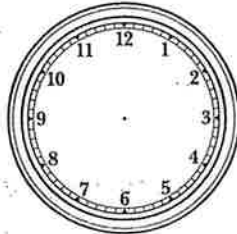
Sometimes people talk about time in fractions of an hour. For example, a quarter of an hour is 15 minutes. Half an hour is 30 minutes. The pictures below show some different fractions of an hour on clocks.


 $\frac{1}{2}$  hour is 30 minutes

 $\frac{1}{4}$  hour is 15 minutes

 $\frac{1}{3}$  hour is 20 minutes

**1** Problem 2 will be easier if you can divide 60 by some other numbers. Solve the division problems below.

**a**  $60 \div 2 = \underline{\hspace{2cm}}$     **b**  $60 \div 3 = \underline{\hspace{2cm}}$     **c**  $60 \div 4 = \underline{\hspace{2cm}}$     **d**  $60 \div 6 = \underline{\hspace{2cm}}$

**2** Draw the following fractions on the clocks. Then write how many minutes are in each fraction of an hour.

Fractions of an Hour	Picture on a Clock	How Many Minutes?
<b>a</b> $\frac{3}{4}$		
<b>b</b> $\frac{2}{3}$		
<b>c</b> $\frac{1}{6}$		

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# Multiplication Tables

1 Complete the multiplication tables below.

ex

x	5	2	9	3	8	6	7	4
2	10	4	18	6	16	12	14	8

a

x	5	2	9	3	8	6	7	4
3								

b

x	5	2	9	3	8	6	7	4
4								

c

x	5	2	9	3	8	6	7	4
8								

2 Solve the division problems below.

$40 \div 5 = \underline{\quad}$

$27 \div 3 = \underline{\quad}$

$16 \div 4 = \underline{\quad}$

$20 \div 5 = \underline{\quad}$

$64 \div 8 = \underline{\quad}$

$32 \div 4 = \underline{\quad}$

$18 \div 6 = \underline{\quad}$

$9 \div 3 = \underline{\quad}$



## CHALLENGE

3 Write an even three-digit number with:

- an odd number in the tens place
- an odd number in the hundreds place that is less than the number in the tens place
- a number greater than 5 in the ones place


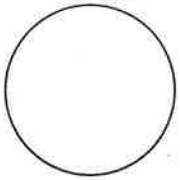
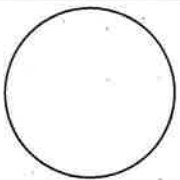
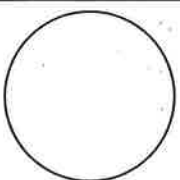
4 What is 2 times the number you wrote above?

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# Fractions & Division

1 Sometimes the answer to a division problem is a fraction. Complete the table below.

Divide the circle into this many equal pieces	Draw on this circle	Complete the division equation
<b>example</b> 3		$1 \div 3 = \frac{1}{3}$
<b>a</b> 2		$1 \div 2 = \underline{\hspace{2cm}}$
<b>b</b> 4		$1 \div 4 = \underline{\hspace{2cm}}$
<b>c</b> 6		$1 \div 6 = \underline{\hspace{2cm}}$

2 Larissa and her two friends bought a giant cookie. They cut it into equal parts so that they each got the same amount. How much of the cookie did each friend get? Draw and label a picture to show your answer.

3 The next day Larissa and her 2 friends bought 4 cookies. If they shared them equally, how much did each friend get? Draw and label a picture to show your answer.



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# More Multiplication Tables

1 Fill in the missing numbers.

$$\begin{array}{r} 8 \\ \times 4 \\ \hline \square \end{array}$$

$$\begin{array}{r} 6 \\ \times 5 \\ \hline \square \end{array}$$

$$\begin{array}{r} 7 \\ \times 7 \\ \hline \square \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \square \end{array}$$

$$\begin{array}{r} 6 \\ \times 6 \\ \hline \square \end{array}$$

$$\begin{array}{r} 8 \\ \times \square \\ \hline 56 \end{array}$$

$$\begin{array}{r} 9 \\ \times \square \\ \hline 63 \end{array}$$

$$\begin{array}{r} \square \\ \times 5 \\ \hline 25 \end{array}$$

$$\begin{array}{r} \square \\ \times 6 \\ \hline 42 \end{array}$$

$$\begin{array}{r} 8 \\ \times \square \\ \hline 72 \end{array}$$

2 Complete the multiplication tables below.

ex

$\times$	5	2	9	3	8	6	7	4
2	10	4	18	6	16	12	14	8

a

$\times$	5	2	9	3	8	6	7	4
10								

b

$\times$	5	2	9	3	8	6	7	4
5								

c

$\times$	5	2	9	3	8	6	7	4
9								



## CHALLENGE

3 Use what you know about multiplying by 10 to help solve these problems.

$$\begin{array}{r} 12 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ \times 5 \\ \hline \end{array}$$

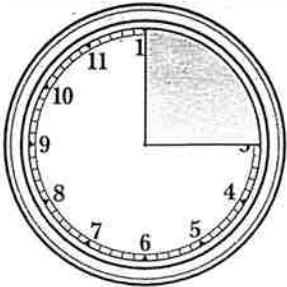
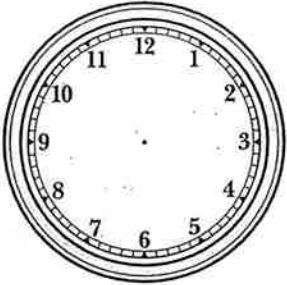
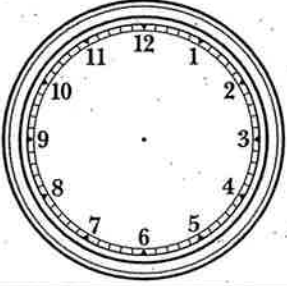
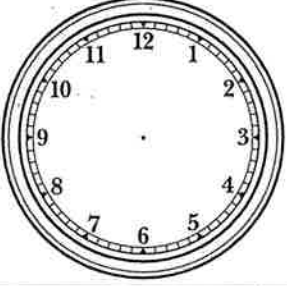
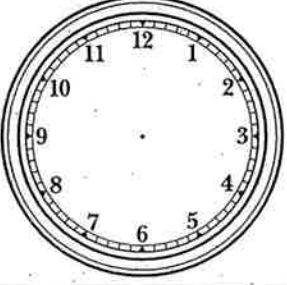
$$\begin{array}{r} 18 \\ \times 9 \\ \hline \end{array}$$

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# Fractions of an Hour

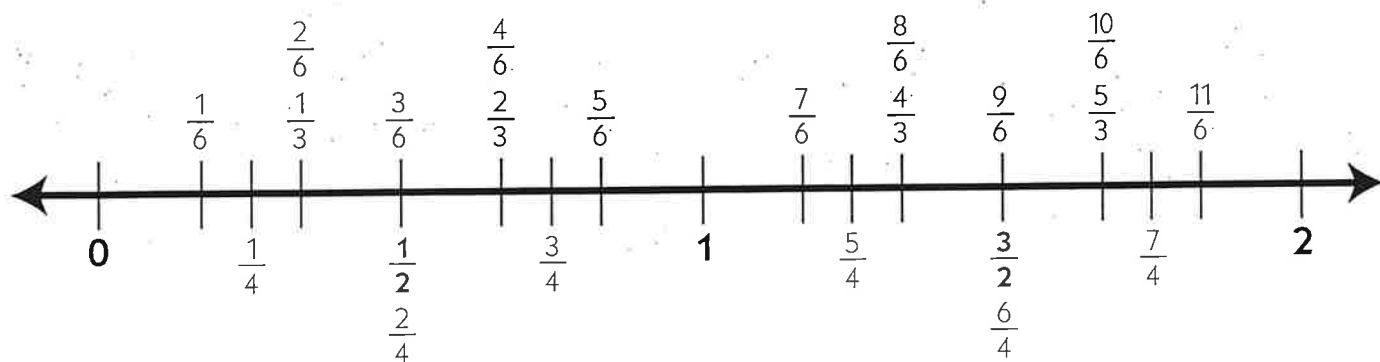
Complete the table.

Fractions of an Hour	Picture on a Clock	How Many Minutes?
<b>example</b>  $\frac{1}{4}$		15 minutes
<b>1</b>  $\frac{1}{3}$		
<b>2</b>  $\frac{3}{4}$		
<b>3</b>  $\frac{2}{3}$		
<b>4</b>  $\frac{1}{6}$		

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# Fractions & Division Tables



1 Write a greater than ( $>$ ), less than ( $<$ ), or equal sign in the circle to complete each number sentence below. Use the number line to help figure out which fraction is greater.

ex $\frac{1}{4} < \frac{1}{2}$	a $\frac{3}{4} \quad \frac{5}{6}$	b $\frac{2}{3} \quad \frac{4}{6}$
c $\frac{5}{3} \quad \frac{5}{4}$	d $\frac{2}{3} \quad \frac{3}{2}$	e $\frac{1}{3} \quad \frac{3}{6}$

2 Complete the division tables below.

ex	$\div$	10	4	18	6	16	12	14	8
	2	5	2	9	3	8	6	7	4

a	$\div$	70	90	20	80	30	50	60	40
	10	7							

b	$\div$	15	30	35	25	10	45	20	40
	5	3							

c	$\div$	8	20	16	36	24	28	12	32
	4	2							

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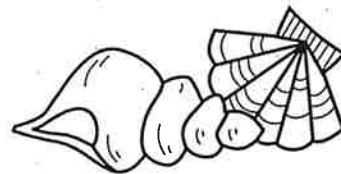
DATE \_\_\_\_\_

## Sharing Problems

**1** Kendra and Veronica's aunt gave them \$19 to spend at the store. If they split the money evenly, how much did they each get to spend? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.



**2** Frank had 42 shells that he wanted to share with his 4 friends. If he gave each friend the same number of shells (and kept the same number of shells for himself), how many shells did each person get? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.



### CHALLENGE

**3** Joe's grandma lives 36 blocks up the street from Joe. On Saturday, Joe rode his bike two-thirds of the way to his grandma's house and then realized he forgot the present he was going to give her. Joe rode back to his house, got the present, and rode all the way to his grandma's house. Then he rode straight home. How many blocks did Joe ride altogether? Use labeled sketches, numbers, and/or words to solve this problem. Show all your work.



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# Multiplying by 10, 100 & 1,000

1 Multiply by 10, 100, and 1,000. Some of the problems below are already done for you as examples.

$$\begin{array}{r} 10 \\ \times 3 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 10 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 100 \\ \times 2 \\ \hline 200 \end{array}$$

$$\begin{array}{r} 100 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 100 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 1,000 \\ \times 2 \\ \hline 2,000 \end{array}$$

$$\begin{array}{r} 1,000 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 1,000 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 1,000 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 100 \\ \times 3 \\ \hline \end{array}$$

2 Fill in the missing numbers.

$$\begin{array}{r} 10 \\ \times 8 \\ \hline \square \end{array}$$

$$\begin{array}{r} 10 \\ \times 4 \\ \hline \square \end{array}$$

$$\begin{array}{r} 100 \\ \times 7 \\ \hline \square \end{array}$$

$$\begin{array}{r} 100 \\ \times 5 \\ \hline \square \end{array}$$

$$\begin{array}{r} 1,000 \\ \times 3 \\ \hline \square \end{array}$$

$$\begin{array}{r} 1,000 \\ \times 5 \\ \hline \square \end{array}$$

$$\begin{array}{r} \square \\ \times 9 \\ \hline 9,000 \end{array}$$

$$\begin{array}{r} 100 \\ \times \square \\ \hline 600 \end{array}$$

$$\begin{array}{r} \square \\ \times 100 \\ \hline 500 \end{array}$$

$$\begin{array}{r} \square \\ \times 10 \\ \hline 80 \end{array}$$

$$\begin{array}{r} \square 5 \\ \times \square \\ \hline 500 \end{array}$$

$$\begin{array}{r} \square 7 \\ \times \square \\ \hline 70 \end{array}$$



## CHALLENGE

$$\begin{array}{r} \square \\ \times \square 3 \\ \hline 3,000,000 \end{array}$$

$$\begin{array}{r} \square \\ \times 40 \\ \hline 400 \end{array}$$

$$\begin{array}{r} \square \\ \times 60 \\ \hline 6,000 \end{array}$$

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# Writing Improper Fractions as Mixed Numbers

1 Complete the multiplication facts.

$$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 70 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 50 \\ \times 70 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 40 \\ \times 30 \\ \hline \end{array}$$

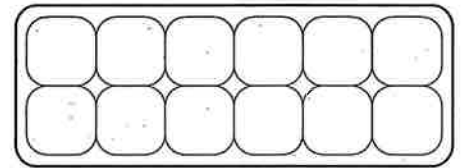
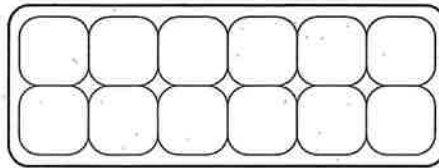
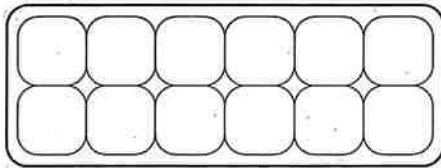
$$\begin{array}{r} 8 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 70 \\ \hline \end{array}$$

$$\begin{array}{r} 80 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 80 \\ \times 70 \\ \hline \end{array}$$

2 Write each fraction as a whole number or a mixed number. Some of the problems are done for you as examples. You can draw on the egg cartons to help.



$$\frac{3}{3} = \underline{\hspace{2cm}}$$

$$\frac{6}{3} = \underline{2}$$

$$\frac{4}{3} = \underline{\hspace{2cm}}$$

$$\frac{5}{3} = \underline{\hspace{2cm}}$$

$$\frac{7}{3} = \underline{2\frac{1}{3}}$$

$$\frac{6}{6} = \underline{\hspace{2cm}}$$

$$\frac{12}{12} = \underline{\hspace{2cm}}$$

$$\frac{18}{12} = \underline{\hspace{2cm}}$$

$$\frac{6}{6} = \underline{\hspace{2cm}}$$

$$\frac{12}{6} = \underline{\hspace{2cm}}$$

$$\frac{8}{6} = \underline{\hspace{2cm}}$$

$$\frac{9}{6} = \underline{\hspace{2cm}}$$



## CHALLENGE

$$\frac{5}{4} = \underline{\hspace{2cm}}$$

$$\frac{8}{4} = \underline{\hspace{2cm}}$$

$$\frac{15}{4} = \underline{\hspace{2cm}}$$

$$\frac{36}{4} = \underline{\hspace{2cm}}$$

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# Using Partial Products to Solve Multiplication Problems

Use partial products to solve each multiplication problem below.

Fill in the array to show the partial products.	Use numbers to show your work.
<b>example</b> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">           6            ●            ●            ●            ●            ●            ●         </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <math display="block">\begin{array}{r} 23 \\ \times 6 \\ \hline 120 \end{array}</math> </div> <div style="margin-left: 10px; text-align: center;">           ● ● ●  <div style="border: 1px solid black; padding: 5px;"> <math display="block">\begin{array}{r} 3 \\ \times 6 \\ \hline 18 \end{array}</math> </div> </div> </div>	$\begin{array}{r} 23 \\ \times 6 \\ \hline 6 \times 20 = 120 \\ 6 \times 3 = + 18 \\ \hline 138 \end{array}$
<b>1</b> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">           7            ●            ●            ●            ●            ●            ●         </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <math display="block">\begin{array}{r} 24 \\ \times 7 \\ \hline \end{array}</math> </div> <div style="margin-left: 10px; text-align: center;">           ● ● ● ●  <div style="border: 1px solid black; padding: 5px; width: 80px; height: 100px;"></div> </div> </div>	$\begin{array}{r} 24 \\ \times 7 \\ \hline \end{array}$
<b>2</b> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">           6            ●            ●            ●            ●            ●            ●         </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <math display="block">\begin{array}{r} 36 \\ \times 6 \\ \hline \end{array}</math> </div> <div style="margin-left: 10px; text-align: center;">           ● ● ● ● ● ●  <div style="border: 1px solid black; padding: 5px; width: 120px; height: 100px;"></div> </div> </div>	$\begin{array}{r} 36 \\ \times 6 \\ \hline \end{array}$
<b>3</b> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">           4            ●            ●            ●            ●            ●         </div> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <math display="block">\begin{array}{r} 47 \\ \times 4 \\ \hline \end{array}</math> </div> <div style="margin-left: 10px; text-align: center;">           ● ● ● ● ● ● ● ●  <div style="border: 1px solid black; padding: 5px; width: 140px; height: 100px;"></div> </div> </div>	$\begin{array}{r} 47 \\ \times 4 \\ \hline \end{array}$

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# More Partial Products

Use partial products to solve each multiplication problem below.

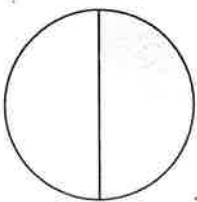
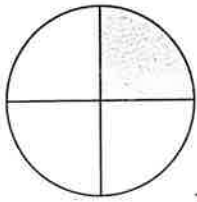
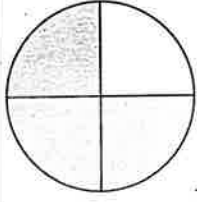
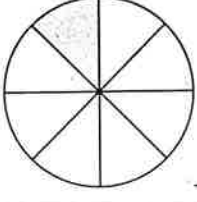
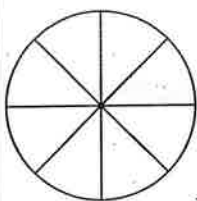
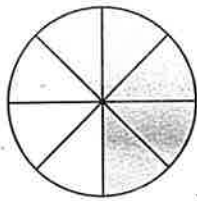
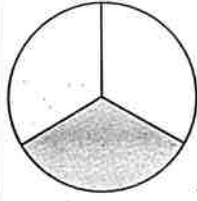

Fill in the array to show the partial products.	Use numbers to show your work.
<p><b>example</b></p> <div style="text-align: center;"> <math>23</math>  </div>	$  \begin{array}{r}  23 \\  \times 16 \\  \hline  10 \times 20 = 200 \\  10 \times 3 = 30 \\  6 \times 20 = 120 \\  6 \times 3 = +18 \\  \hline  368  \end{array}  $
<p><b>1</b></p> <div style="text-align: center;"> <math>36</math>  </div>	$  \begin{array}{r}  36 \\  \times 14 \\  \hline  \end{array}  $
<p><b>2</b></p> <div style="text-align: center;"> <math>114</math>  </div>	$  \begin{array}{r}  114 \\  \times 13 \\  \hline  \end{array}  $

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# More Fractions & Division

1 Write a fraction to show how much of each circle is filled in.

<b>example</b>  $\frac{1}{2}$	<b>a</b>  _____	<b>b</b>  _____	<b>c</b>  _____
<b>d</b>  _____	<b>e</b>  _____	<b>f</b>  _____	<b>g</b>  _____

2 Solve the following division problems. The answers can help you with problem 3.

$24 \div 2 = \underline{\hspace{2cm}}$	$24 \div 4 = \underline{\hspace{2cm}}$	$24 \div 8 = \underline{\hspace{2cm}}$	$24 \div 3 = \underline{\hspace{2cm}}$
$240 \div 2 = \underline{\hspace{2cm}}$	$240 \div 4 = \underline{\hspace{2cm}}$	$240 \div 8 = \underline{\hspace{2cm}}$	$240 \div 3 = \underline{\hspace{2cm}}$

3 You can use what you know about division to find different fractions of a number.

**example** Half of 24 is 12.

**a** One-third of 24 is \_\_\_\_\_.

**b** One-eighth of 24 is \_\_\_\_\_.

**c** One-fourth of 24 is \_\_\_\_\_.

**d** One-third of 240 is \_\_\_\_\_.

**e** Half of 240 is \_\_\_\_\_.

**f** One-eighth of 240 is \_\_\_\_\_.

**g** One-fourth of 240 is \_\_\_\_\_.



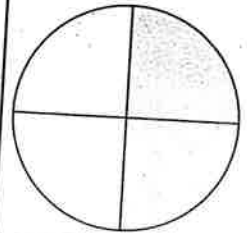
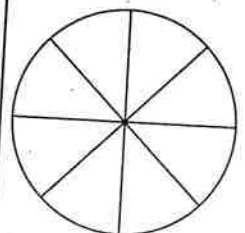
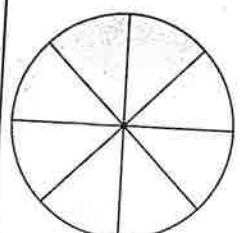
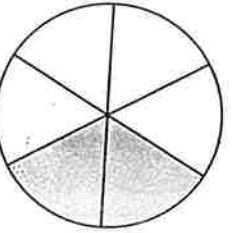
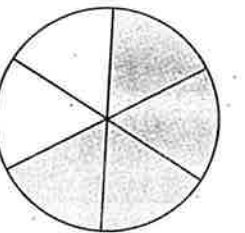
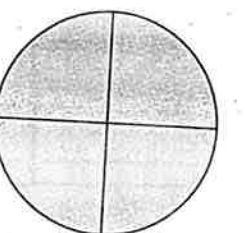
## CHALLENGE

**h** Three-fourths of 24 is \_\_\_\_\_.

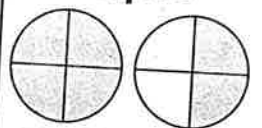
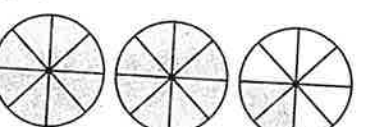
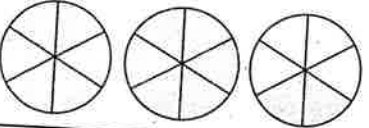
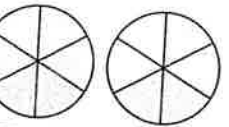
**i** Two-thirds of 240 is \_\_\_\_\_.

# Fractions & Mixed Numbers

1 The circles below are divided into equal parts. Write two fractions to show what part of each circle is filled in.

<b>example</b>  $\frac{1}{2}$ $\frac{2}{4}$	<b>a</b> 	<b>b</b> 
<b>c</b> 	<b>d</b> 	<b>e</b> 

2 The circles below are divided into equal parts. Write a fraction and a mixed number to show how many circles are filled in.

	Fraction	Mixed Number		Fraction	Mixed Number
<b>example</b> 	$\frac{3}{2}$	$1\frac{1}{2}$	<b>a</b> 		
<b>b</b> 			<b>c</b> 		

3 Fill in the missing fractions or mixed numbers.

Fractions	ex $\frac{5}{2}$	a $\frac{9}{2}$	b $\frac{9}{4}$	c $\frac{14}{4}$	d	e	<b>CHALLENGE</b>	
Mixed Number	$2\frac{1}{2}$				$3\frac{1}{2}$	$2\frac{3}{4}$	f $\frac{62}{3}$	g $30\frac{1}{3}$

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## Decimals & Fractions

**1** Write the place value of the underlined digit in each number. The place values are spelled for you here:

hundreds	tens	ones	tenths	hundredths
----------	------	------	--------	------------

**example** 2.03 hundredths

**a** 3.17 \_\_\_\_\_

**b** 120.4 \_\_\_\_\_

**c** 506.92 \_\_\_\_\_

**d** 54.29 \_\_\_\_\_

**e** 32.7 \_\_\_\_\_

**2** Write each decimal number.

**ex a** Twenty-three and two-tenths: 23.2

**ex b** One hundred thirty and five-hundredths: 130.05

**a** Six and seven-hundredths: \_\_\_\_\_

**b** Two-hundred sixty-five and eight-tenths: \_\_\_\_\_

**3** Write each fraction or mixed number as a decimal number.

<b>ex a</b> $5\frac{3}{10} = 5.3$	<b>ex b</b> $12\frac{4}{100} = 12.04$	<b>ex c</b> $3\frac{17}{100} = 3.17$
<b>a</b> $\frac{7}{10} =$	<b>b</b> $3\frac{5}{100} =$	<b>c</b> $\frac{4}{100} =$
<b>d</b> $4\frac{38}{100} =$	<b>e</b> $1\frac{9}{100} =$	<b>f</b> $1\frac{9}{10} =$

**4** Use a greater than (>), less than (<), or equal sign to show the relationship between the decimal numbers below.

<b>ex</b> 1.09 < 1.9	<b>a</b> 1.12      1.2	<b>b</b> 3.5      3.48
<b>c</b> 23.81      23.85	<b>d</b> 4.50      4.5	<b>e</b> 3.06      3.65

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# Ordering Decimals & Fractions

1 Write the decimal number that is equal to each fraction below.

<b>ex</b> $\frac{25}{100} = 0.25$	<b>a</b> $\frac{5}{10} =$	<b>b</b> $\frac{50}{100} =$	<b>c</b> $\frac{75}{100} =$
<b>d</b> $\frac{1}{4} =$	<b>e</b> $\frac{1}{2} =$	<b>f</b> $\frac{3}{4} =$	<b>g</b> $\frac{10}{10} =$

2a Write each decimal number in the box where it belongs.

0.28      0.06      0.92      0.3      0.8      0.6      0.15      0.71

less than $\frac{1}{4}$	between $\frac{1}{4}$ and $\frac{1}{2}$	between $\frac{1}{2}$ and $\frac{3}{4}$	greater than $\frac{3}{4}$

b Write the decimal numbers above in order from least to greatest.

\_\_\_\_\_ least \_\_\_\_\_ greatest

3 Write the following fractions and decimals in order from least to greatest.

0.3       $\frac{9}{10}$       0.78       $\frac{1}{4}$       0.08      0.23       $\frac{3}{4}$

\_\_\_\_\_ least \_\_\_\_\_ greatest

4 Write the following fractions and decimals in order from least to greatest.

3.6       $\frac{5}{4}$        $\frac{1}{3}$       0.02       $1\frac{1}{2}$       2.25       $\frac{10}{4}$

\_\_\_\_\_ least \_\_\_\_\_ greatest

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# Decimal & Fraction Riddles

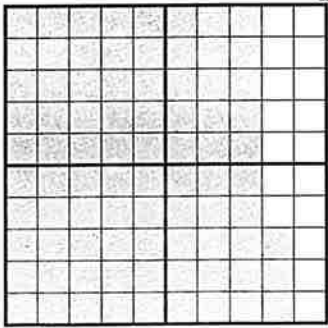
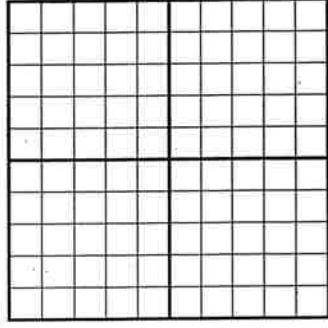
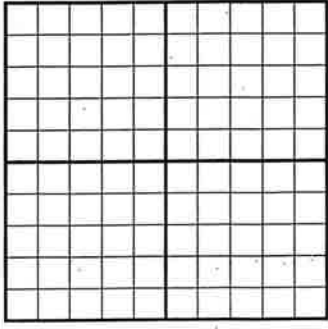
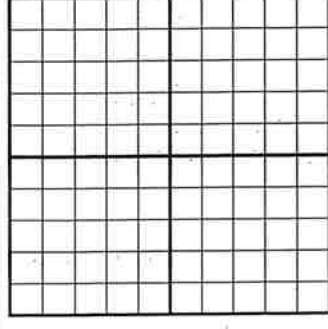
1 Write the decimal number that is equal to each fraction below.

<b>ex a</b> $\frac{1}{2} = \underline{0.5}$	<b>ex b</b> $1\frac{1}{2} = \underline{1.5}$	<b>ex c</b> $\frac{6}{10} = \underline{0.6}$	<b>ex d</b> $\frac{79}{100} = \underline{0.79}$
<b>a</b> $\frac{1}{4} = \underline{\hspace{2cm}}$	<b>b</b> $\frac{3}{4} = \underline{\hspace{2cm}}$	<b>c</b> $\frac{7}{10} = \underline{\hspace{2cm}}$	<b>d</b> $\frac{2}{100} = \underline{\hspace{2cm}}$
<b>e</b> $\frac{30}{100} = \underline{\hspace{2cm}}$	<b>f</b> $\frac{53}{100} = \underline{\hspace{2cm}}$	<b>g</b> $2\frac{6}{100} = \underline{\hspace{2cm}}$	<b>h</b> $3\frac{1}{4} = \underline{\hspace{2cm}}$

2 Use  $>$ ,  $<$ , or  $=$  to compare each pair of numbers.

<b>a</b> $\frac{3}{2}$ 1.5	<b>b</b> 0.6 $\frac{9}{100}$	<b>c</b> $\frac{36}{100}$ 0.25	<b>d</b> 0.75 $\frac{9}{12}$
<b>e</b> $83\frac{1}{2}$ 83.48	<b>f</b> $\frac{125}{100}$ 1.07	<b>g</b> $\frac{82}{100}$ 0.9	<b>h</b> $74\frac{3}{4}$ 74.8

3 Shade in and label each grid to show a decimal number that fits the description. There is more than one right answer for each one.

<p><b>example</b> Show a number that is greater than <math>\frac{1}{2}</math> and has an odd number in the hundredths place.</p>  <p style="text-align: right;"><u>0.83</u></p>	<p><b>a</b> Show a number that is greater than <math>\frac{3}{4}</math> and has a 0 in the hundredths place.</p>  <p style="text-align: right;"><u>                    </u></p>
<p><b>b</b> Show a number that is less than <math>\frac{1}{4}</math> and has an even number in the tenths place.</p>  <p style="text-align: right;"><u>                    </u></p>	<p><b>c</b> Show a number between <math>\frac{1}{4}</math> and <math>\frac{1}{2}</math> with an odd number in the tenths place.</p>  <p style="text-align: right;"><u>                    </u></p>



# A

Correct: \_\_\_\_\_

Multiply.

1	$5 \times 0 =$	23	$5 \times 6 =$
2	$8 \times 0 =$	24	$5 \times 7 =$
3	$9 \times 0 =$	25	$9 \times 5 =$
4	$5 \times 1 =$	26	$9 \times 6 =$
5	$8 \times 1 =$	27	$9 \times 7 =$
6	$9 \times 1 =$	28	$8 \times 5 =$
7	$5 \times 1 =$	29	$8 \times 6 =$
8	$5 \times 2 =$	30	$8 \times 7 =$
9	$5 \times 3 =$	31	$5 \times 10 =$
10	$8 \times 1 =$	32	$5 \times 9 =$
11	$8 \times 2 =$	33	$5 \times 8 =$
12	$8 \times 3 =$	34	$8 \times 10 =$
13	$9 \times 1 =$	35	$8 \times 9 =$
14	$9 \times 2 =$	36	$8 \times 8 =$
15	$9 \times 3 =$	37	$9 \times 10 =$
16	$5 \times 5 =$	38	$9 \times 9 =$
17	$5 \times 4 =$	39	$9 \times 8 =$
18	$8 \times 5 =$	40	$5 \times 8 =$
19	$8 \times 4 =$	41	$8 \times 9 =$
20	$9 \times 5 =$	42	$9 \times 7 =$
21	$9 \times 4 =$	43	$8 \times 8 =$
22	$5 \times 5 =$	44	$9 \times 9 =$

**B**

Multiply.

Improvement: \_\_\_\_\_

Correct: \_\_\_\_\_

1	$5 \times 1 =$	23	$5 \times 6 =$
2	$8 \times 1 =$	24	$5 \times 7 =$
3	$9 \times 1 =$	25	$8 \times 5 =$
4	$5 \times 0 =$	26	$8 \times 6 =$
5	$8 \times 0 =$	27	$8 \times 7 =$
6	$9 \times 0 =$	28	$9 \times 5 =$
7	$5 \times 1 =$	29	$9 \times 6 =$
8	$5 \times 2 =$	30	$9 \times 7 =$
9	$5 \times 3 =$	31	$5 \times 10 =$
10	$9 \times 1 =$	32	$5 \times 9 =$
11	$9 \times 2 =$	33	$5 \times 8 =$
12	$9 \times 3 =$	34	$9 \times 10 =$
13	$8 \times 1 =$	35	$9 \times 9 =$
14	$8 \times 2 =$	36	$9 \times 8 =$
15	$8 \times 3 =$	37	$8 \times 10 =$
16	$5 \times 5 =$	38	$8 \times 9 =$
17	$5 \times 4 =$	39	$8 \times 8 =$
18	$9 \times 5 =$	40	$5 \times 9 =$
19	$9 \times 4 =$	41	$9 \times 8 =$
20	$8 \times 5 =$	42	$8 \times 7 =$
21	$8 \times 4 =$	43	$9 \times 9 =$
22	$5 \times 5 =$	44	$8 \times 9 =$