Math At-Home Practice

5th Grade

*The following can be completed by students to review and practice at home.
Solve.

1. \(40 \times 2\) 
2. \(400 \times 2\) 
3. \(400 \times 20\) 
4. \(4,000 \times 2\) 
5. \(80 \times 60\) 
6. \(800 \times 60\) 
7. \(800 \times 6\) 
8. \(80 \times 600\) 
9. \(70 \times 20\) 
10. \(900 \times 40\) 
11. \(800 \times 70\) 
12. \(6,000 \times 7\)

Solve.

13. A tortoise walks 27 miles in a year. At this rate, how many miles will this tortoise walk in 10 years?

14. If the tortoise lives to be 100 years old, how many miles will it walk during its lifetime?

15. Every month, Paolo earns $40 for walking his neighbor’s dog after school. How much does he earn from this job in one year?

16. There are 60 seconds in a minute and 60 minutes in an hour. How many seconds are there in an hour?

17. An elephant eats about 2,500 pounds of food in 10 days. About how much food does an elephant eat in 1,000 days?
Remembering

Write the multiplier or divisor for each pair of equivalent fractions.

1. \( \frac{4}{5} = \frac{12}{15} \)

   Multiplier = ________  Divisor = ________

2. \( \frac{25}{60} = \frac{5}{12} \)

   Multiplier = ________  Divisor = ________

3. \( \frac{12}{20} = \frac{3}{5} \)

   Multiplier = ________  Divisor = ________

4. \( \frac{2}{3} = \frac{20}{30} \)

   Multiplier = ________

5. \( \frac{27}{36} = \frac{3}{4} \)

   Divisor = ________

6. \( \frac{1}{8} = \frac{7}{56} \)

   Multiplier = ________

Solve.

7. Jordan shoots 100 3-point shots per basketball practice. She makes 44 of these shots. What decimal represents the number of shots she makes?

   ________

8. At a county fair, 9 people out of 1,000 earned a perfect score in a carnival game. What decimal represents the number of people who earned a perfect score?

   ________

Solve.

9. \( \frac{1}{6} \cdot 60 = \) ________

10. \( \frac{1}{3} \cdot 21 = \) ________

11. \( \frac{1}{9} \) of 81 = ________

12. \( \frac{1}{3} \cdot 24 = \) ________

13. \( \frac{1}{5} \) of 60 = ________

14. \( \frac{1}{8} \cdot 16 = \) ________

15. **Stretch Your Thinking** Using a multiple of ten for at least one factor, write an equation with a product that has four zeros.

   ________
Solve.

1. \[60 \times 40\]  
2. \[70 \times 40\]  
3. \[700 \times 60\]  

4. \[300 \times 50\]  
5. \[40 \times 50\]  
6. \[900 \times 30\]  

7. \[400 \times 80\]  
8. \[200 \times 50\]  
9. \[300 \times 200\]  

The table shows the sizes of Farmer Reuben’s fields. Use the table and a separate sheet of paper to help you answer each question.

<table>
<thead>
<tr>
<th>Field</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn Field</td>
<td>400 feet by 60 feet</td>
</tr>
<tr>
<td>Wheat Field</td>
<td>700 feet by 200 feet</td>
</tr>
<tr>
<td>Barley Field</td>
<td>200 feet by 200 feet</td>
</tr>
</tbody>
</table>

10. What is the area of the corn field?

11. What is the area of the wheat field?

12. What is the area of the barley field?

13. How many square feet of land did Farmer Reuben plant in all?
Remembering

Compare.

1. $\frac{5}{8} \bigcirc \frac{5}{7}$
2. $\frac{3}{4} \bigcirc \frac{5}{6}$
3. $\frac{9}{10} \bigcirc \frac{8}{9}$

4. $\frac{3}{8} \bigcirc \frac{5}{8}$
5. $\frac{1}{7} \bigcirc \frac{1}{8}$
6. $\frac{4}{5} \bigcirc \frac{4}{7}$

Multiply.

7. $\frac{5}{6} \cdot 36 =$
8. $\frac{1}{8} \cdot 40 =$
9. $\frac{2}{5} \cdot 60 =$

10. $\frac{2}{3} \cdot 33 =$
11. $\frac{3}{4} \cdot 36 =$
12. $\frac{2}{9} \cdot 45 =$

Solve.

13. $50 \times 2$
14. $500 \times 2$
15. $5,000 \times 2$

16. $60 \times 40$
17. $600 \times 40$
18. $600 \times 4$

19. Stretch Your Thinking Explain how to predict the number of zeros in the product for the expression $600 \cdot 500$.

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________
Solve the first problem with Place Value Sections.
Solve the other problems using any method you like.
Use a separate sheet of paper.

1. \[46 \times 73\]

2. \[84 \times 19\]
3. \[67 \times 53\]
4. \[91 \times 28\]

Solve.

5. Kamini needs to know the area of her yard so that she can buy the right amount of grass seed. The yard is 26 feet by 19 feet. What is the area of Kamini’s yard in square feet?

6. A restaurant has 16 crates of juice. Each crate holds 12 gallons of juice. How many gallons of juice are there altogether?

7. Mr. Jackson is taking 23 students to see a movie. Tickets for the movie cost 75 cents. How much money will Mr. Jackson spend on student tickets?

8. There are usually 20 school days in a month. Grace has band practice for 60 minutes every day after school. How many minutes does she usually practice each month?
Remembering

Compare. Write > (greater than) or < (less than).

1. 0.7 〇 0.71
2. 0.2 〇 0.02
3. 0.76 〇 0.68

4. 0.31 〇 0.43
5. 0.21 〇 0.12
6. 0.346 〇 0.348

Estimate the sum or difference by rounding each mixed number to the nearest whole number. Then find the actual sum or difference.

7. \(2\frac{1}{8} + 6\frac{6}{7}\)
   Estimate: 
   Sum: 

8. \(7\frac{9}{10} - 4\frac{1}{9}\)
   Estimate: 
   Difference: 

9. \(5\frac{7}{8} - 1\frac{1}{10}\)
   Estimate: 
   Difference: 

10. \(6\frac{3}{8} + 7\frac{2}{5}\)
    Estimate: 
    Sum: 

Multiply.

11. \(80 \times 60\)
12. \(200 \times 30\)
13. \(400 \times 40\)

14. \(600 \times 50\)
15. \(500 \times 10\)
16. \(300 \times 90\)

17. Stretch Your Thinking Explain how to check multiplication using addition or division. Include an example in your explanation.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Solve. Use any method.

1. \[78 \times 26\]  
2. \[93 \times 42\]  
3. \[39 \times 84\]  
4. \[56 \times 71\]

The table shows how many newspapers are delivered each week by three paper carriers. Use the table to answer the questions. Use 1 year = 52 weeks.

<table>
<thead>
<tr>
<th>Papers Delivered Each Week</th>
<th>Jameel</th>
<th>Clare</th>
<th>Mason</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>93</td>
<td>97</td>
<td>98</td>
</tr>
</tbody>
</table>

5. How many papers does Jameel deliver in a year?

6. How many papers does Clare deliver in a year?

7. How could you find how many papers Mason delivers in a year without doing any multiplication? What is the answer?

Solve.

8. Ray needs to know the area of his floor so he can buy the right amount of carpet. The floor is 21 feet by 17 feet. What is the area of the floor?

9. Maria is buying flowers. Each tray of flowers costs $24. If she buys 15 trays, what will the total cost be?
Remembering

Copy each exercise. Then subtract.

1. $9,000 - 865 = \underline{ } \quad 2. 105.66 - 98.53 = \underline{ } \quad 3. 45,688 - 5.65 = \underline{ }$

Multiply. You do not need to simplify.

4. $\frac{5}{7} \cdot \frac{1}{3} = \underline{ } \quad 5. \frac{3}{5} \cdot \frac{1}{5} = \underline{ } \quad 6. \frac{1}{5} \cdot \frac{2}{7} = \underline{ }$

7. $\frac{2}{3} \cdot 5 = \underline{ } \quad 8. \frac{3}{4} \cdot \frac{3}{4} = \underline{ } \quad 9. \frac{1}{2} \cdot \frac{5}{9} = \underline{ }$

Solve the first problem with Place-Value Sections. Solve the other problems using any method you like.

10. 

11. $15 \times 42$

12. $65 \times 81$

13. $48 \times 24$

14. Stretch Your Thinking How is multiplying a 1-digit number and a 2-digit number the same as, and different from, multiplying two 2-digit numbers?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Multiplying Two-Digit Numbers
Multiply.

1. 397 \times 9
2. 723 \times 7
3. 4,188 \times 3
4. 4,294 \times 4
5. 67 \times 82
6. 56 \times 49
7. 36 \times 29
8. 87 \times 71
9. 28 \times 27
10. 37 \times 54
11. 63 \times 91
12. 73 \times 35
13. 46 \times 83
14. 57 \times 75
15. 94 \times 47
16. 66 \times 86

Solve.

17. Jamal is building a bed for his dog. The dimensions of the bed are 27 inches by 36 inches. What is the area of the bottom of the bed?

18. Mr. Battle drives 9 miles to work every day. He works 5 days a week. How many miles does he travel to and from work over 52 weeks?
Add or subtract.

1. \( \frac{3}{4} + \frac{2}{8} \)  
2. \( \frac{4}{5} - \frac{3}{10} \)  
3. \( \frac{5}{3} + \frac{2}{3} \)

4. \( 6\frac{5}{6} + 2\frac{5}{12} \)  
5. \( 10 - 2\frac{3}{5} \)  
6. \( 3\frac{2}{5} + 1\frac{1}{15} \)

Find each product by first rewriting each mixed number as a fraction.

7. \( \frac{2}{9} \cdot \frac{2}{3} = \)  
8. \( \frac{1}{5} \cdot 10 = \)  

9. \( \frac{4}{4} \cdot \frac{1}{3} = \)  
10. \( \frac{2}{5} \cdot \frac{3}{7} = \)  

Solve. Use any method.

11. \( 64 \times 87 \)  
12. \( 76 \times 35 \)  
13. \( 53 \times 41 \)

14. \( 24 \times 72 \)  
15. \( 19 \times 66 \)  
16. \( 58 \times 36 \)

17. Stretch Your Thinking Explain how to use mental math to find the product of 64 and 25.
4-6 Homework

Solve.

1. 0.9 × 7
2. 0.6 × 80
3. 0.04 × 9
4. 0.05 × 70
5. 0.16 × 7

6. 7.0 × 8
7. 0.09 × 30
8. 0.07 × 60
9. 0.17 × 81
10. 940 × 0.2

11. 3.43 × 7
12. 0.29 × 86
13. 0.15 × 196
14. 1.57 × 52
15. 2.03 × 121

Three runners started making a table for April to show how far they run every day, every week, and the entire month.

Show your work.

16. Finish the table for the runners.

<table>
<thead>
<tr>
<th>Runner</th>
<th>Miles Per Day</th>
<th>Miles Per Week</th>
<th>Miles in April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cedric</td>
<td>0.6</td>
<td>7 × 0.6 =</td>
<td>30 × 0.6 =</td>
</tr>
<tr>
<td>Shannon</td>
<td>2.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regina</td>
<td>1.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Give the total miles in May for each runner below.

Cedric:        Shannon:        Regina:
Remembering

Add.

1. \( \frac{2}{7} + \frac{1}{5} \)  
2. \( \frac{1}{3} + \frac{2}{5} \)  
3. \( \frac{1}{3} + \frac{1}{8} \)  

4. \( \frac{1}{2} + \frac{1}{5} \)  
5. \( \frac{4}{5} + \frac{1}{6} \)  
6. \( \frac{5}{8} + \frac{1}{10} \)

Copy each exercise. Then add.

7. \( 46\xi + \$3.48 = \)  
8. \( 0.23 \text{ m} + 0.54 \text{ m} = \)  
9. \( 33\xi + \$11 = \)

Multiply.

10. \( 458 \times 3 \)  
11. \( 893 \times 6 \)  
12. \( 6,236 \times 7 \)  
13. \( 6,982 \times 5 \)

14. Stretch Your Thinking  Marissa bought four bottles of water. Each bottle of water was 95 cents. Write an equation with the same product as the total cost but different factors.
Solve.

1. $0.3 \times 0.6 = \underline{0.18}$
2. $0.4 \times 0.07 = \underline{0.028}$
3. $0.03 \times 0.8 = \underline{0.024}$

4. $5 \times 0.07 = \underline{0.35}$
5. $0.02 \times 0.3 = \underline{0.006}$
6. $0.05 \times 0.9 = \underline{0.045}$

7. $1.8 \times 6 = \underline{10.8}$
8. $0.23 \times 40 = \underline{9.2}$
9. $0.14 \times 0.9 = \underline{0.126}$
10. $0.36 \times 0.8 = \underline{0.288}$

11. $1.4 \times 0.5 = \underline{0.7}$
12. $0.32 \times 51 = \underline{16.32}$
13. $0.6 \times 0.14 = \underline{0.084}$
14. $2.6 \times 0.9 = \underline{2.34}$

Solve using mental math.

15. $82 \times 0.01 = \underline{0.82}$
16. $385 \times 0.1 = \underline{38.5}$
17. $2,194 \times 0.01 = \underline{21.94}$

Solve.

18. Simon sold bottles of water at the marathon on Saturday for $0.75 per bottle. He sold 43 bottles. How much money did he earn?

19. Lauren has 9.9 meters of ribbon. She is cutting it into 100 equal pieces. That is the same as multiplying 9.9 by 0.01. How long will each piece of ribbon be?

20. A furlong is a unit of measure used in horse racing. Every year, horses race 10 furlongs in the Kentucky Derby. One furlong is equal to 0.125 mile. How long is the Kentucky Derby in miles?
Use the Distributive Property to rewrite each problem so it has only two factors. Then solve.

1. \((7 \times 200) + (7 \times 800) = \) ____________________________

2. \((44 \times 3) + (56 \times 3) = \) ____________________________

Multiply. Simplify first if you can.

3. \(\frac{5}{8} \times \frac{6}{7} = \) ________

4. \(\frac{1}{5} \times \frac{2}{9} = \) ________

5. \(\frac{1}{2} \times \frac{4}{9} = \) ________

6. \(\frac{2}{3} \times \frac{15}{16} = \) ________

7. \(\frac{1}{8} \times \frac{6}{7} = \) ________

8. \(\frac{9}{10} \times \frac{5}{6} = \) ________

Solve.

9. \(0.7 \times 6 = \) __________

10. \(0.02 \times 60 = \) __________

11. \(0.15 \times 34 = \) __________

12. \(0.41 \times 66 = \) __________

13. \(1.24 \times 6 = \) __________

14. \(260 \times 0.3 = \) __________

15. Stretch Your Thinking Explain where to place the decimal point in the product for the expression \(0.5 \times 0.03\).
## Solve.

1. \[4.2 \times 8.1\]
2. \[9.4 \times 6.3\]
3. \[0.78 \times 4.7\]
4. \[0.05 \times 3.7\]
5. \[0.3 \times 1.52\]
6. \[0.80 \times 3.8\]
7. \[7.1 \times 4.5\]
8. \[2.4 \times 0.64\]
9. \[0.06 \times 5.7\]
10. \[9.9 \times 6.6\]
11. \[8.1 \times 5.7\]
12. \[0.07 \times 24.3\]

## Complete. Name the property used.

13. \[(4.3 \times 6.2) - (\text{______} \times 1.1) = 4.3 \times (6.2 - 1.1)\]

14. \[8.9 \times (5.3 \times 3.4) = (8.9 \times \text{______}) \times 3.4\]

## Solve.

15. Lester’s car can go 15.4 miles on 1 gallon of gas. How far can he go on 0.7 gallon?

16. Clara wants to cover the top of her jewelry box. The top of the box is a rectangle with a length of 9.4 cm and a width of 8.3 cm. What is the total area she wants to cover?
Solve. Explain how you know your answer is reasonable. Show your work.

1. A rectangular sand box has a length of $5\frac{1}{3}$ feet and a width of $3\frac{3}{4}$ feet. What is its perimeter?
   
   Answer: ________________________________

   Why is the answer reasonable?

   ________________________________

Solve.

2. Kelly babysits for $5\frac{5}{6}$ hours on the weekend. This is $2\frac{1}{12}$ hours more than she babysits during the week. How many hours does she babysit during the week?

   ________________________________

3. Lucas is making a recipe that requires $\frac{1}{4}$ cup of wheat flour and $1\frac{7}{8}$ cups of white flour. Altogether, how many cups of flour does the recipe require?

   ________________________________

Solve.

4. $0.5 \times 0.4 = \underline{_______}$

5. $0.6 \times 0.09 = \underline{_______}$

6. $0.08 \times 0.3 = \underline{_______}$

7. $1.7 \times 8$

8. $0.55 \times 50$

9. $0.07 \times 0.7$

10. Stretch Your Thinking Write a decimal equation that has a product of 3.15. (Do not use 1 as a factor.)

   ________________________________
Solve.

1. \( \frac{4.8}{100} \)  
2. \( \frac{2.9}{0.3} \)  
3. \( \frac{0.56}{20} \)  
4. \( \frac{0.69}{0.7} \)  

5. \( \frac{2.6}{3.4} \)  
6. \( \frac{3.8}{0.5} \)  
7. \( \frac{1.5}{4.9} \)  
8. \( \frac{3.4}{1.6} \)  

Complete the equations.

9. \( 0.7 \times 10^1 = \)  
10. \( 0.98 \times 10^1 = \)  
11. \( 5.63 \times 10^1 = \)  
   \( 0.7 \times 10^2 = \)  
   \( 0.98 \times 10^2 = \)  
   \( 5.63 \times 10^2 = \)  
   \( 0.7 \times 10^3 = \)  
   \( 0.98 \times 10^3 = \)  
   \( 5.63 \times 10^3 = \)  

12. \( 3.7 \times 10^1 = \)  
13. \( 2.04 \times 10^1 = \)  
14. \( 0.42 \times \)  
   \( 3.7 \times 10^2 = \)  
   \( 2.04 \times \)  
   \( 3.7 \times \)  
   \( 2.04 \times 10^3 = \)  
   \( 0.42 \times 10^2 = \)  
   \( 0.42 \times 10^3 = \)  

Solve.

15. The Sunrise Café gets tea bags in boxes of 1,000. If the café charges $1.75 for each cup of tea, and each cup of tea gets one tea bag, how much money does the café receive if they use a whole box of 1,000 teabags?

16. If a box of tea bags costs $95, how much money does the café actually make after they have used up the box of tea and have paid for it?
Add or subtract.

1. $10 - 3\frac{3}{4}$
2. $\frac{5}{8} + \frac{3}{8}$
3. $6\frac{4}{5} - 1\frac{1}{5}$

4. $2\frac{1}{3} + 5\frac{1}{3}$
5. $1\frac{2}{9} + 3\frac{5}{9}$
6. $5\frac{1}{2} - \frac{1}{2}$

Copy each exercise. Then add or subtract.

7. $0.67 + 0.42 = \underline{\quad}$
8. $7 - 3.2 = \underline{\quad}$
9. $7.8 - 0.8 = \underline{\quad}$

Solve.

10. $4.3 \times 6.7$
11. $0.70 \times 5.6$
12. $0.32 \times 2.4$

13. Stretch Your Thinking Complete the equation $8.9 \cdot \square = 8,900$ using a power of ten. Explain how the product will change if the exponent changes.
Round to the nearest tenth.
1. 0.38
2. 0.94
3. 0.621
4. 0.087

Round to the nearest hundredth.
5. 0.285
6. 0.116
7. 0.709
8. 0.563

Write an estimated answer for each problem. Then find and write each exact answer.

<table>
<thead>
<tr>
<th>Estimated Answer</th>
<th>Exact Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. 38 \times 92 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \approx \underline{\hspace{2cm}}</td>
<td>38 \times 92 = \underline{\hspace{2cm}}</td>
</tr>
<tr>
<td>10. 8.1 \times 4.2 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \approx \underline{\hspace{2cm}}</td>
<td>8.1 \times 4.2 = \underline{\hspace{2cm}}</td>
</tr>
<tr>
<td>11. 7.65 \times 0.9 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \approx \underline{\hspace{2cm}}</td>
<td>7.65 \times 0.9 = \underline{\hspace{2cm}}</td>
</tr>
<tr>
<td>12. 3.8 \times 6.02 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \approx \underline{\hspace{2cm}}</td>
<td>3.8 \times 6.02 = \underline{\hspace{2cm}}</td>
</tr>
<tr>
<td>13. 1.02 \times 0.9 \approx \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \approx \underline{\hspace{2cm}}</td>
<td>1.02 \times 0.9 = \underline{\hspace{2cm}}</td>
</tr>
</tbody>
</table>

Solve.

14. A factory makes 394 motorcycles each week. If there are 52 weeks in a year, how many motorcycles will the factory make in a year?
   Estimate: ____________________________
   Exact answer: _______________________

15. CDs are $15.25 each. How much will it cost to buy 3?
   Estimate: ____________________________
   Exact answer: _______________________

Show your work.
Remembering

Round to the nearest whole number.
1. 5.159 
2. 12.7 
3. 4.872 

Round to the nearest tenth.
4. 45.461 
5. 3.12 
6. 77.039 

Write an equation. Then solve.  

7. A rectangle has an area of 48 square feet and a length of 10 feet. What is its width?  

8. A length of string that is 22 feet long is being cut into pieces that are \( \frac{1}{3} \) foot long. How many pieces will there be?  

Solve.

9. \[ 100 \times 3.7 \]
10. \[ 5.6 \times 0.4 \]
11. \[ 0.14 \times 60 \]

12. \[ 7.1 \times 2.9 \]
13. \[ 6.8 \times 0.5 \]
14. \[ 5.8 \times 1.2 \]

15. Stretch Your Thinking  Taylor estimated the music department would raise $1,100 for new uniforms by selling tickets to a performance next week. Each ticket will be $12.75. About how many tickets does the music department need to sell for Taylor's estimate to be reasonable?
Homework

Find each product.

1. \(57 \times 0.31\)  
2. \(0.29 \times 74\)  
3. \(7.6 \times 8.3\)  
4. \(0.35 \times 94\)

5. \(4.8 \times 0.92\)  
6. \(6.5 \times 0.81\)  
7. \(84 \times 0.13\)  
8. \(0.9 \times 0.04\)

Solve. Check that your answers are reasonable.

9. Josefina is buying 10 pounds of salmon which costs $6.78 per pound. How much will the salmon cost?

10. It is 9.2 miles between Mr. Rossi's place of work and his home. Because he comes home for lunch, he drives this distance 4 times a day. How far does Mr. Rossi drive each day?

11. Mr. Rossi works 20 days a month. How far does he drive in a month?

12. Gayle is saving to buy a bicycle. The bicycle costs $119.90. She has saved 0.7 of what she needs. How much has she saved so far?
Multiply.
1. 98 \times 15 = ______  
2. 658 \times 7 = ______  
3. 54 \times 7 = ______  

4. 3,147 \times 4 = ______  
5. 5,609 \times 2 = ______  
6. 66 \times 75 = ______  

Write your answers as fractions.
7. \frac{2}{9} \times 5 = ______  
8. \frac{3}{4} \times 9 = ______  
9. \frac{2}{3} \times 7 = ______  

10. \frac{7}{12} \times 15 = ______  
11. \frac{5}{8} \times 3 = ______  
12. \frac{5}{6} \times 9 = ______  

Round to the nearest tenth.
13. 0.43 ______  
14. 0.88 ______  
15. 0.076 ______  

Round to the nearest hundredth.
16. 0.456 = ______  
17. 0.109 ______  
18. 0.541 = ______  

19. Stretch Your Thinking Write a multiplication word problem using decimals for both factors. Then solve your word problem.

__________

__________

__________

__________

__________

__________
The life cycle of a butterfly has four stages. One stage is a caterpillar.

Using the length and height of the caterpillar shown, use the descriptions below to draw the adult butterfly that develops from the caterpillar. Remember, a tenth of a centimeter is a millimeter.

- The length of your butterfly should be 3.6 times the height of the caterpillar.
- The wingspan of your butterfly should be 1.75 times the length of the caterpillar.
Remembering

Write a decimal number for each word name.

1. six hundredths
2. fourteen and eight thousandths

3. nine thousandths
4. five tenths

Solve.

5. \( \frac{1}{2} \div 10 = \) __________
6. \( \frac{1}{5} \cdot 4 = \) __________
7. \( 12 \cdot \frac{1}{4} = \) __________

8. \( \frac{1}{9} \div 3 = \) __________
9. \( \frac{2}{3} \cdot \frac{2}{5} = \) __________
10. \( 3 \div \frac{1}{6} = \) __________

Find each product.

11. \( 0.48 \times 23 = \) __________
12. \( 0.35 \times 13 = \) __________
13. \( 0.86 \times 91 = \) __________

14. \( 0.37 \times 6.5 = \) __________
15. \( 0.22 \times 76 = \) __________
16. \( 5.4 \times 3.2 = \) __________

17. Stretch Your Thinking Sarah is stringing insect beads to make a bracelet. The butterfly bead is 0.45 inch long and the ladybug bead has a length of 0.27 inch. She uses each type of insect bead and places them end to end. How many of each type of bead does she use to make a line of insect beads measuring 1.71 inches?
Complete each division. Check your answer.

1. \(5 \longdiv{4,820}\)  
2. \(8 \longdiv{7,548}\)  
3. \(9 \longdiv{7,535}\)

4. \(3 \longdiv{2,958}\)  
5. \(7 \longdiv{5,857}\)  
6. \(6 \longdiv{5,556}\)

7. \(7 \longdiv{6,945}\)  
8. \(8 \longdiv{5,624}\)  
9. \(4 \longdiv{3,254}\)

Solve. Use estimation to check the solution. Show your work.

10. Mrs. Wong drove between Chicago and St. Louis 8 times last month. Altogether she drove 2,376 miles. How far is it from Chicago to St. Louis?

11. Jay has 6,200 beads. He is making bracelets with 9 beads each. How many bracelets can he make? How many beads will be left?

12. There are 5,280 feet in a mile. There are 3 feet in a yard. How many yards are there in a mile?

13. The Pencil Pal factory wraps pencils in packages of 6. Today there are 5,750 pencils to be packaged. How many packages will there be? How many pencils will be left over?
Remembering

Write each fraction as a decimal.

1. \( \frac{2}{10} \)  
2. \( \frac{556}{1,000} \)  
3. \( \frac{6}{100} \)

4. \( \frac{17}{100} \)  
5. \( \frac{23}{1,000} \)  
6. \( \frac{5}{1,000} \)

7. \( \frac{1}{10} \)  
8. \( \frac{33}{100} \)  
9. \( \frac{85}{100} \)

Solve.

10. \( 400 \times 70 \)  
11. \( 300 \times 30 \)  
12. \( 700 \times 40 \)

13. \( 20 \times 50 \)  
14. \( 900 \times 50 \)  
15. \( 800 \times 30 \)

Solve.

16. Sarah is dividing pies into eighths. She has 4 pies. How many eighths will she have?

17. The track team plans to sprint 20 miles this school year. The runners will sprint \( \frac{1}{4} \) mile each day. How many days will it take them to sprint 20 miles?

18. Stretch Your Thinking  Mrs. Thomas bought a bed for $1,548 and three armchairs. The bed cost 4 times as much as one armchair. How much did Mrs. Thomas spend altogether?
Divide.

1. 39 \( \overline{2,886} \)
2. 81 \( \overline{7,533} \)
3. 68 \( \overline{4,967} \)
4. 72 \( \overline{4,968} \)

5. 28 \( \overline{2,520} \)
6. 33 \( \overline{1,287} \)
7. 46 \( \overline{1,426} \)
8. 55 \( \overline{990} \)

Solve.

9. The lunchroom has enough seats for 168 students. Each class has 24 students. How many classes can eat in the lunchroom at the same time?

10. Mrs. Randall bought tickets to the art museum for all the fifth-grade students. Each ticket cost $12, and the total cost of the tickets was $1,152. How many fifth-grade students are there?

11. The Harmony Hotel has a total of 1,596 rooms. There are 42 rooms on each floor. How many floors does the Harmony Hotel have?

12. This year Martin earned $1,615 mowing lawns, shoveling driveways, and doing yardwork. This is 19 times as much as he earned last year. How much did Martin earn last year?
Remembering

Solve. Use any method. 

1. \[68 \times 21\]  
2. \[36 \times 92\]  
3. \[25 \times 44\]  

Show your work.

Complete each division. Check your answer.

4. \[5 \div 1,267\]  
5. \[3 \div 1,374\]  
6. \[7 \div 4,618\]

7. Chloe sorts her beads. The number of red beads she has is \(\frac{55}{6}\) times the number of green beads. If she has 60 green beads, how many red beads does she have?

8. Brad plans to bike \(15\frac{3}{4}\) miles. He has gone \(\frac{2}{3}\) of the entire distance. How far has he gone?

9. Stretch Your Thinking Write and solve a division problem that divides a 4-digit number by a 2-digit number. How did you estimate the first digit of the quotient?
Divide.

1. 34)7,276  
2. 85)6,120  
3. 73)4,309  
4. 38)3,576  

5. 57)4,722  
6. 26)7,903  
7. 65)5,918  
8. 69)1,796  

Solve.  

9. A carousel factory has 1,252 carousel horses.  
   48 horses are placed on each carousel. How many carousels can the factory build?  
   
   How many horses will be left over?  

10. Farmer Parson collected 1,183 chicken eggs this morning. He will put them in cartons that hold a dozen eggs each.  
    How many cartons will he fill?  

   How many eggs will be left over?  

    
    
    
    

Show your work.

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Multiply. Simplify first if you can.

1. \( \frac{3}{4} \cdot \frac{12}{13} = \) ________________
2. \( \frac{1}{4} \cdot \frac{3}{7} = \) ________________

3. \( \frac{7}{8} \cdot \frac{4}{5} = \) ________________
4. \( \frac{3}{8} \cdot \frac{4}{15} = \) ________________

5. \( \frac{4}{5} \cdot \frac{10}{12} = \) ________________
6. \( \frac{1}{5} \cdot \frac{5}{6} = \) ________________

Complete the equations.

7. \( 0.65 \times 10^1 = \) ________
8. \( 0.8 \times 10^1 = \) ________
9. \( 2.45 \times 10^1 = \) ________

\( 0.65 \times 10^2 = \) ________
\( 0.8 \times 10^2 = \) ________
\( 2.45 \times 10^2 = \) ________

\( 0.65 \times 10^3 = \) ________
\( 0.8 \times 10^3 = \) ________
\( 2.45 \times 10^3 = \) ________

Divide.

10. \( 41 \div 3,444 \)
11. \( 36 \div 1,944 \)
12. \( 93 \div 7,254 \)

13. In Marla's school, \( \frac{6}{15} \) of the students do not ride the bus to school. Of these students \( \frac{5}{9} \) walk to school. What fraction of the students in Marla's school walk to school?

14. Stretch Your Thinking Ben starts with a certain number of fruit chew packages. He puts 27 packages into each of 85 cases. He has 3 packages left. How many packages of fruit chews did Ben start with? Explain how you know.
Solve. Circle the choice that tells how you gave your answer.

1. A Ferris wheel holds 48 people. There are 823 people with tickets to ride the Ferris wheel. How many times will the Ferris wheel need to be run to give everyone a ride?

   whole number only  |  round up |  mixed number  |  decimal  |  remainder only

2. Bananas cost 89 cents each at the fruit stand. Isabel has $11.75. How many bananas can she buy?

   whole number only  |  round up |  mixed number  |  decimal  |  remainder only

3. The 15 members of a running club made $1,338 selling magazines. They will divide the money equally. How much should each runner get?

   whole number only  |  round up |  mixed number  |  decimal  |  remainder only

4. There are 524 goldfish in the fish pond. They will be put in indoor tanks for the winter. If each tank holds 45 fish, how many tanks will be needed?

   whole number only  |  round up |  mixed number  |  decimal  |  remainder only

5. Mr. Lopez made 339 ounces of strawberry jam. He plans to divide the jam equally among his 12 cousins. How many ounces of jam will each cousin get?

   whole number only  |  round up |  mixed number  |  decimal  |  remainder only

Show your work.
Compare. Write > (greater than) or < (less than).

1. 0.6 □ 0.06
2. 0.4 □ 0.41
3. 0.87 □ 0.8

4. 0.67 □ 0.76
5. 0.44 □ 0.39
6. 0.657 □ 0.668

Divide.

7. \(\frac{5,745}{66}\)
8. \(\frac{4,806}{54}\)
9. \(\frac{2,597}{36}\)

Solve.

10. Martin asked friends to buy raffle tickets. On Saturday, he sold tickets to 5 of the 12 friends he asked. On Sunday, he sold tickets to 7 of the 9 friends he asked. On which day did he sell tickets to the greater fraction of the friends he asked?

11. Emma bought \(\frac{7}{8}\) yard of striped ribbon and \(\frac{8}{9}\) yard of solid ribbon. Which kind of ribbon did she buy more of?

12. Stretch Your Thinking Write and solve a division word problem for which the remainder is the answer.
1. 7\)3,990
2. 44\)2,156
3. 5\)7,003

4. 28\)1,763
5. 54\)4,458
6. 6\)3,039

Solve.

7. This morning, a factory produced 6,000 cans of beans and packaged them in boxes of 48 cans. How many boxes were filled?

8. Six friends earned $645 for painting some rooms in a neighbor's house. If they divide the money equally, how much will each friend get?

9. The floor of a ballroom has an area of 2,470 square feet. If the length of the floor is 65 feet, what is its width?

10. Felipe just started collecting stamps. He has 36 stamps so far. His uncle Carlo has 1,890 stamps in his collection. The number of stamps Carlo has is how many times the number Felipe has?
5-5

Remembering

Multiply.

1. \( \frac{326}{2} \)  
2. \( \frac{575}{5} \)  
3. \( \frac{5,492}{8} \)  
4. \( \frac{4,512}{9} \)

5. \( \frac{58}{43} \)  
6. \( \frac{79}{52} \)  
7. \( \frac{36}{21} \)  
8. \( \frac{89}{67} \)

Solve. Give your answer in simplest form.

9. \( \frac{\frac{1}{8}}{5} = \)  
10. \( \frac{\frac{1}{4}}{\frac{2}{3}} = \)  
11. \( \frac{\frac{5}{6}}{\frac{2}{3}} = \)  

12. \( 6 \div \frac{1}{3} = \)  
13. \( \frac{\frac{5}{6}}{\frac{5}{8}} = \)  
14. \( 6\frac{3}{4} \div \frac{1}{6} = \)

Solve. Circle the choice that tells how you gave your answer.

15. A rollercoaster holds 45 people. There are 387 people waiting to board the rollercoaster. How many times will the rollercoaster need to run to give everyone a ride?

\[ \text{whole number only} \]
\[ \text{round up} \]
\[ \text{mixed number} \]
\[ \text{decimal} \]
\[ \text{remainder only} \]

16. Stretch Your Thinking I am a number less than 3,000. When you divide me by 32, my remainder is 30. When you divide me by 58, my remainder is 44. What number am I?
Solve.

1. $9 \div 6.57$
2. $5 \div 36.41$
3. $4 \div 9.584$

4. $6 \div 207.9$
5. $23 \div 153.87$
6. $7 \div 654.5$

7. $45 \div 431.1$
8. $2 \div 7.006$
9. $16 \div 5.76$

Solve.  

10. Teresa bought 16 roses for $20.64. How much did she pay for each rose?

11. Barry's dog Cubby is 1.26 meters long. Cubby is 7 times as long as Douglas's guinea pig Taffy. How long is Taffy?

12. Farmer Sanchez has 1,408.86 acres of land. He will divide it into 27 equal fields for spring planting. How many acres will be in each field?

13. Six friends will stay at a cabin in the woods this weekend. The distance to the cabin is 148.5 miles. Each person will drive one sixth of the distance. How far will each person drive?
Solve.

1. Aiden buys a pair of jeans that costs $45.28. The sales tax that will be added to the cost of the jeans is $3.62. What is the total cost of the jeans?

2. When Madison got her kitten, Fluffy, he weighed 787.37 grams. He now weighs 2,085.8 grams more than he did when Madison first brought him home. How much does Fluffy weigh now?

Solve.

3. \( 150 \times 0.6 \)  
4. \( 3.41 \times 48 \)  
5. \( 2.28 \times 5 \)

6. \( 0.9 \times 4 \)  
7. \( 0.45 \times 86 \)  
8. \( 0.03 \times 80 \)

Divide.

9. \( 33 \div 2,143 \)  
10. \( 9 \div 4,140 \)  
11. \( 4 \div 6,403 \)

12. **Stretch Your Thinking** What part of this problem needs to be changed to make it correct? Explain how you know.

   \[ 46 \div 8 = 6.75 \]
Solve.

1. Nella and Lydia are hiking 15 miles today. After every 0.5 mile, they will stop and rest. How many times will they rest during the hike?

2. A cookie cutter shark is 0.4 meter long, and a thresher shark is 6 meters long. How many times as long as the cookie cutter shark is the thresher shark?

3. At a large wedding, the cakes were cut into hundredths, so each piece was 0.01 of a whole cake. If there were 12 cakes, how many pieces were there?

4. A millimeter is 0.001 of a meter. How many millimeters are there in 7 meters?

5. Paco saves $0.75 each day for a new bicycle helmet. He has saved $36. For how many days has Paco been saving?

Solve.

6. $0.9\overline{63}$
7. $0.08\overline{72}$
8. $0.007\overline{42}$
9. $0.6\overline{420}$

10. $0.4\overline{372}$
11. $0.6\overline{534}$
12. $0.26\overline{884}$
13. $0.71\overline{1,136}$
Remembering

Solve.

1. Tyler is making a history project and needs two poster boards. He cuts one to measure 42.25 inches in length. He cuts the second to measure 34.75 inches in length. What is the difference between the two lengths of poster board?

2. Ella has $2,251.88 in her bank account. She withdraws $852. How much money is left in her bank account?

Solve.

3. \[0.05 \times 0.4\]

4. \[2.5 \times 5\]

5. \[0.32 \times 70\]

6. \[0.2 \times 0.8\]

7. \[0.09 \times 0.4\]

8. \[0.6 \times 0.09\]

Solve.

9. \[5 \div 17.4\]

10. \[6 \div 416.46\]

11. \[7 \div 32.55\]

12. Stretch Your Thinking Look at the division problem \(112 \div 0.056\). Without solving, how many zeros will be in the quotient? How do you know?

Show your work.
Divide.

1. 0.07)4.2
2. 0.8)2.4
3. 0.05)4.8
4. 0.24)2.064

5. Circle the division that does not have the same answer as the others.
   54 ÷ 6   5.4 ÷ 0.6   0.54 ÷ 0.06   0.054 ÷ 0.006

Solve.

6. A beekeeper collected 7.6 liters of honey. She will pour it into bottles that each hold 0.95 liter. How many bottles will she fill?

7. A very small dinosaur, the microraptor, was only 1.3 feet long. One of the largest dinosaurs, the diplodocus, was about 91 feet long. How many times as long as the microraptor was the diplodocus?

8. Tomorrow, in the town of Eastwood, there will be a big race. The course is 5.25 kilometers long. A water station will be set up every 0.75 kilometer, including at the finish line. How many water stations will there be?

9. Marisol's bedroom has an area of 29.76 square meters. The length of the room is 6.2 meters. What is its width?
Remembering

Round to the nearest tenth.

1. 1.28
2. 14.21
3. 8.148

Round to the nearest hundredth.

4. 4.769
5. 45.124
6. 16.107

Solve.

7. 7.7 \times 1.4
8. 3.1 \times 0.05
9. 5.79 \times 0.9

10. 3.4 \times 8.8
11. 3.5 \times 0.46
12. 8.6 \times 0.90

Solve.

13. 0.9 \overline{36}
14. 0.006 \overline{48}
15. 0.04 \overline{32}

16. 0.7 \overline{364}
17. 0.34 \overline{2,210}
18. 0.83 \overline{1,494}

19. Stretch Your Thinking Must a decimal divisor and a decimal dividend have the same number of decimal places in order to have a whole-number quotient? Write a division equation using two decimal numbers to support your answer.
Divide.

1. \(0.7\overline{35}\)  
2. \(0.06\overline{24}\)  
3. \(0.8\overline{0.64}\)  
4. \(0.03\overline{18}\)

5. \(3\overline{33}\)  
6. \(0.05\overline{0.65}\)  
7. \(12\overline{72}\)  
8. \(0.04\overline{11.56}\)

9. \(8\overline{216}\)  
10. \(0.8\overline{490.4}\)  
11. \(28\overline{2,380}\)  
12. \(0.033\overline{5.148}\)

Solve. Explain how you know your answer is reasonable. Show your work.

13. Georgia works as a florist. She has 93 roses to arrange in vases. Each vase holds 6 roses. How many roses will Georgia have left over?

14. Julia is jarring peaches. She has 25.5 cups of peaches. Each jar holds 3 cups. How many jars will Julia need to hold all the peaches?

15. The area of a room is 114 square feet. The length of the room is 9.5 feet. What is the width of the room?
Add or subtract.

1. \( \frac{1}{2} + \frac{5}{6} \)
2. \( 2\frac{3}{5} + 5\frac{3}{10} \)
3. \( 1\frac{1}{3} - \frac{1}{6} \)
4. \( 7\frac{3}{10} + 2\frac{1}{5} \)
5. \( 9\frac{1}{8} - 2\frac{3}{4} \)
6. \( 12 - 5\frac{2}{3} \)

Find each product.

7. \( 7.8 \times 1.2 \)
8. \( 3.3 \times 0.67 \)
9. \( 91 \times 0.49 \)
10. \( 0.25 \times 72 \)
11. \( 68 \times 0.17 \)
12. \( 0.76 \times 28 \)

Divide.

13. \( 0.08 \div 6.4 \)
14. \( 0.8 \div 7.2 \)
15. \( 0.07 \div 5.67 \)
16. \( 0.58 \div 5.336 \)
17. \( 0.9 \div 6.3 \)
18. \( 0.05 \div 1.75 \)

19. **Stretch Your Thinking** Write a real world division problem for which you would drop the remainder.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Multiply or divide.

1. \(1.5 \times 5 = \) 
2. \(0.4 \times 0.05 = \)
3. \(0.004 \times 0.03 = \)

4. \(0.55\) 
   \(\times 0.07\)

5. \(0.25\) 
   \(\times 0.12\)

6. \(22.3\) 
   \(\times 6.2\)

7. \(20.8\) 
   \(\times 0.26\)

8. \(0.3)0.108\)

9. \(0.11)407\)

10. \(0.67)32.16\)

11. \(0.44)105.6\)

For each problem, decide whether you need to multiply or divide. Then solve. Explain how you know your answer is reasonable.

12. Harriet makes yo-yos. She needs 38 inches of string for each yo-yo. How many yo-yos can she make with 875 inches of string? How many inches of string will be left over?

13. Roberto will save \(\frac{1}{6}\) of his allowance each day. If he gets $2.00 a day, about how much money will he save each day? Round your answer to the nearest penny.

14. Raisins cost $0.97 per pound. Michael bought $15.52 worth of raisins. How many pounds of raisins did he buy?
Multiply.

1. \(47 \times 7\)
2. \(181 \times 3\)
3. \(4,609 \times 5\)
4. \(2,115 \times 6\)
5. \(86 \times 75\)
6. \(22 \times 15\)
7. \(53 \times 25\)
8. \(38 \times 36\)

Divide.

9. \(0.06\overline{24}\)
10. \(0.3\overline{228.6}\)
11. \(0.08\overline{28.4}\)

Tell whether you need to multiply or divide. Then solve. Show your work.

12. A rectangle has an area of 4 square meters. The width is \(\frac{1}{5}\) meter. What is the length of the rectangle?

13. Audubon Preschool has 154 children in one age group. One seventh of those children arrive for early morning drop off. How many children arrive for early morning drop off?

14. Stretch Your Thinking Write a division word problem that requires dividing two decimals to solve. Write a multiplication equation to check your answer.
Dividing numbers involves dividends, divisors, and quotients.

Write a division problem (including the quotient) that satisfies all three statements.

1. The dividend is a one-digit whole number.
   The divisor is a one-digit whole number.
   The quotient is a one-digit whole number.

2. The dividend is a two-digit whole number.
   The divisor is a one-digit whole number.
   The quotient is a one-digit whole number.

3. The dividend is a two-digit whole number.
   The divisor is less than 1, and a number in tenths.
   The quotient is a two-digit whole number.

4. The dividend is a two-digit whole number.
   The divisor is greater than 1, and a number in tenths.
   The quotient is a two-digit whole number.

5. The dividend is a number in tenths.
   The divisor is a one-digit whole number.
   The quotient is a number in tenths.

6. The dividend is a decimal in hundredths.
   The divisor is a decimal in hundredths.
   The quotient is a one-digit whole number.

7. The dividend is a decimal in hundredths.
   The divisor is a decimal in hundredths.
   The quotient is a two-digit whole number.
Add or subtract.

1. $21 + 1.08 = \underline{\hspace{1cm}}$
2. $0.62 + 0.49 = \underline{\hspace{1cm}}$
3. $0.06 + 0.5 = \underline{\hspace{1cm}}$

4. $6 - 0.09 = \underline{\hspace{1cm}}$
5. $3.01 - 0.8 = \underline{\hspace{1cm}}$
6. $12.05 - 8 = \underline{\hspace{1cm}}$

Complete each fraction box.

7. \[
\begin{array}{|c|c|}
\hline
\frac{1}{3} & \frac{4}{9} \\
\hline
> \\
+ \\
- \\
\cdot \\
\hline
\end{array}
\]

8. \[
\begin{array}{|c|c|}
\hline
\frac{2}{7} & \frac{1}{4} \\
\hline
> \\
+ \\
- \\
\cdot \\
\hline
\end{array}
\]

Multiply or divide.

9. \[37.5 \times 3.5 = \underline{\hspace{1cm}}\]
10. \[0.63 \times 0.27 = \underline{\hspace{1cm}}\]
11. \[0.93)567.3\]

12. Stretch Your Thinking Use the term *dividend*, *divisor*, or *quotient* to complete each sentence. Then write a division equation that fits the description.

The \underline{\hspace{1cm}} is a decimal in thousandths.

The \underline{\hspace{1cm}} is a decimal in thousandths.

The \underline{\hspace{1cm}} is a two-digit whole number.

Division problem: \underline{\hspace{1cm}}