

Remembering

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

1. $\frac{4}{5} = \frac{12}{15}$

Multiplier = _____

2. $\frac{25}{60} = \frac{5}{12}$

Divisor = _____

3. $\frac{12}{20} = \frac{3}{5}$

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.

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.
$$\begin{array}{r} 50 \\ \times 2 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 500 \\ \times 2 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 5,000 \\ \times 2 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 60 \\ \times 40 \\ \hline \end{array}$$

17.
$$\begin{array}{r} 600 \\ \times 40 \\ \hline \end{array}$$

18.
$$\begin{array}{r} 600 \\ \times 4 \\ \hline \end{array}$$

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

Remembering

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

1. $0.7 \bigcirc 0.71$

2. $0.2 \bigcirc 0.02$

3. $0.76 \bigcirc 0.68$

4. $0.31 \bigcirc 0.43$

5. $0.21 \bigcirc 0.12$

6. $0.346 \bigcirc 0.348$

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.
$$\begin{array}{r} 80 \\ \times 60 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 200 \\ \times 30 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 400 \\ \times 40 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 600 \\ \times 50 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 500 \\ \times 10 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 300 \\ \times 90 \\ \hline \end{array}$$

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

Remembering

Copy each exercise. Then subtract.

1. $9,000 - 865 =$ _____ 2. $105.66 - 98.53 =$ _____ 3. $45,688 - 5.65 =$ _____

Multiply. You do not need to simplify.

4. $\frac{5}{7} \cdot \frac{1}{3} =$ _____

5. $\frac{3}{5} \cdot \frac{1}{5} =$ _____

6. $\frac{1}{5} \cdot \frac{2}{7} =$ _____

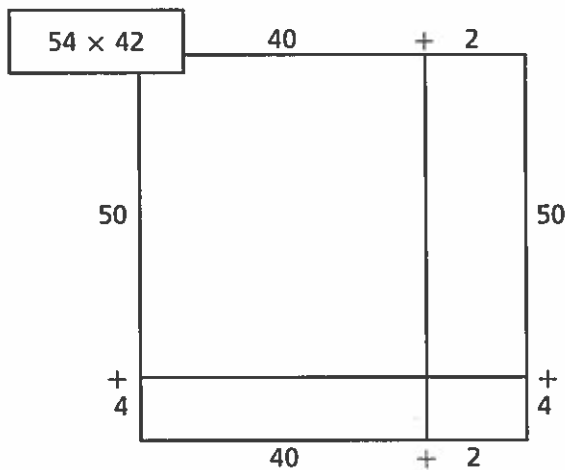
7. $\frac{2}{3} \cdot 5 =$ _____

8. $\frac{3}{4} \cdot \frac{3}{4} =$ _____

9. $\frac{1}{2} \cdot \frac{5}{9} =$ _____

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

10.



11.
$$\begin{array}{r} 15 \\ \times 42 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 65 \\ \times 81 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 48 \\ \times 24 \\ \hline \end{array}$$

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?

Remembering

Add or subtract.

$$\begin{array}{r} 1. \quad 3\frac{3}{4} \\ + 2\frac{1}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 4\frac{1}{5} \\ - 2\frac{3}{10} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 5\frac{2}{5} \\ + 3\frac{1}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 6\frac{5}{6} \\ + 2\frac{5}{12} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 10 \\ - 2\frac{3}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 3\frac{2}{5} \\ + 1\frac{1}{15} \\ \hline \end{array}$$

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

$$7. \quad \frac{2}{9} \cdot 2\frac{2}{3} = \underline{\hspace{2cm}}$$

$$8. \quad 1\frac{3}{5} \cdot 10 = \underline{\hspace{2cm}}$$

$$9. \quad 4\frac{1}{4} \cdot 1\frac{1}{3} = \underline{\hspace{2cm}}$$

$$10. \quad 2\frac{2}{5} \cdot \frac{3}{7} = \underline{\hspace{2cm}}$$

Solve. Use any method.

$$\begin{array}{r} 11. \quad 64 \\ \times 87 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 76 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 53 \\ \times 41 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 24 \\ \times 72 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 19 \\ \times 66 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 58 \\ \times 36 \\ \hline \end{array}$$

17. **Stretch Your Thinking** Explain how to use mental math to find the product of 64 and 25.

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. $46¢ + \$3.48 =$

8. $0.23 \text{ m} + 0.54 \text{ m} =$

9. $33¢ + \$11 =$

Multiply.

10.
$$\begin{array}{r} 458 \\ \times 3 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 893 \\ \times 6 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 6,236 \\ \times 7 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 6,982 \\ \times 5 \\ \hline \end{array}$$

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.
- _____
- _____

Remembering

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. $\frac{5}{8} \cdot \frac{6}{7} =$ _____

4. $\frac{1}{5} \cdot \frac{2}{9} =$ _____

5. $\frac{1}{2} \cdot \frac{4}{9} =$ _____

6. $\frac{2}{3} \cdot \frac{15}{16} =$ _____

7. $\frac{1}{8} \cdot \frac{6}{7} =$ _____

8. $\frac{9}{10} \cdot \frac{5}{6} =$ _____

Solve.

9.
$$\begin{array}{r} 0.7 \\ \times 6 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 0.02 \\ \times 60 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.15 \\ \times 34 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.41 \\ \times 66 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 1.24 \\ \times 6 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 260 \\ \times 0.3 \\ \hline \end{array}$$

15. **Stretch Your Thinking** Explain where to place the decimal point in the product for the expression $0.5 \cdot 0.03$.

Remembering

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.

Show your work.

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. $0.5 \times 0.4 =$ _____ 5. $0.6 \times 0.09 =$ _____ 6. $0.08 \times 0.3 =$ _____

7.
$$\begin{array}{r} 1.7 \\ \times 8 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 0.55 \\ \times 50 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 0.07 \\ \times 0.7 \\ \hline \end{array}$$

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

Remembering

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. $0.67 + 0.42 = \underline{\hspace{2cm}}$

8. $7 - 3.2 = \underline{\hspace{2cm}}$

9. $7.8 - 0.8 = \underline{\hspace{2cm}}$

Solve.

10.
$$\begin{array}{r} 4.3 \\ \times 6.7 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 0.70 \\ \times 5.6 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.32 \\ \times 2.4 \\ \hline \end{array}$$

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.

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.

Show your work.

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.

$$\begin{array}{r} 9. \quad 100 \\ \times 3.7 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 5.6 \\ \times 0.4 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 0.14 \\ \times 60 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 7.1 \\ \times 2.9 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 6.8 \\ \times 0.5 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 5.8 \\ \times 1.2 \\ \hline \end{array}$$

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?

Remembering

Multiply.

1. $98 \cdot 15 =$ _____

2. $658 \cdot 7 =$ _____

3. $54 \cdot 7 =$ _____

4. $3,147 \cdot 4 =$ _____

5. $5,609 \cdot 2 =$ _____

6. $66 \cdot 75 =$ _____

Write your answers as fractions.

7. $\frac{2}{9} \cdot 5 =$ _____

8. $\frac{3}{4} \cdot 9 =$ _____

9. $\frac{2}{3} \cdot 7 =$ _____

10. $\frac{7}{12} \cdot 15 =$ _____

11. $\frac{5}{8} \cdot 3 =$ _____

12. $\frac{5}{6} \cdot 9 =$ _____

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.

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.
$$\begin{array}{r} 0.48 \\ \times 23 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 0.35 \\ \times 13 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 0.86 \\ \times 91 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 0.37 \\ \times 6.5 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 0.22 \\ \times 76 \\ \hline \end{array}$$

16.
$$\begin{array}{r} 5.4 \\ \times 3.2 \\ \hline \end{array}$$

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?
- _____