

Solve the problems.

1.
$$\begin{array}{r} 516 \\ \times 49 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 985 \\ \times 64 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 845 \\ \times 25 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 387 \\ \times 87 \\ \hline \end{array}$$

Add the decimals.

1.
$$\begin{array}{r} 0.479 \\ + 0.563 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 0.184 \\ + 0.942 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 0.854 \\ + 0.736 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 0.327 \\ + 0.384 \\ \hline \end{array}$$

Subtract the dollar amounts.

1.
$$\begin{array}{r} \$489.25 \\ - \$26.14 \\ \hline \end{array}$$

2.
$$\begin{array}{r} \$836.71 \\ - \$15.89 \\ \hline \end{array}$$

3.
$$\begin{array}{r} \$505.46 \\ - \$47.22 \\ \hline \end{array}$$

4.
$$\begin{array}{r} \$624.34 \\ - \$143.89 \\ \hline \end{array}$$

Find the quotients.

1.
$$8 \overline{) 4384}$$

2.
$$4 \overline{) 5392}$$

3.
$$7 \overline{) 9002}$$

4.
$$5 \overline{) 7415}$$

Round the multipliers to the nearest 10 and write a new multiplication problem. Find and compare the products of the problems and the estimates. Circle the problem that gave the best estimate.

$$\begin{array}{r} 53 \\ \times 39 \\ \hline \end{array} \quad \times \underline{\hspace{2cm}}$$

$$\begin{array}{r} 82 \\ \times 65 \\ \hline \end{array} \quad \times \underline{\hspace{2cm}}$$

$$\begin{array}{r} 74 \\ \times 96 \\ \hline \end{array} \quad \times \underline{\hspace{2cm}}$$

Write the next number in each pattern.

1. 4, 8, 12, 16, _____

4. 100, 10, 1.0, 0.1, _____

2. 3, 9, 15, 21, _____

5. 50, 42, 34, 26 _____

3. 0.45, 0.55, 0.65, 0.75, _____

Answer questions about rounding decimals. Fill in the circles to the left of the correct answers.

1. Which numbers would be rounded to 8.563? ☐ 8.56274 ☐ 8.56351 ☐ 8.56327 ☐ 8.56245

2. Which numbers would be rounded to 7.1402? ☐ 7.14013 ☐ 7.14024 ☐ 7.14026 ☐ 7.14018

3. Which numbers would be rounded to 0.35 ☐ 0.34824 ☐ 0.34456 ☐ 0.35910 ☐ 0.3537

4. Which numbers would be rounded to 2.9? ☐ 2.81548 ☐ 2.9063 ☐ 2.9247 ☐ 2.8348

5. Which numbers would be rounded to 6.248? ☐ 6.24753 ☐ 6.24791 ☐ 6.24884 ☐ 6.28435

Solve each problem using the distributive property. Use the example as a guide.

$$4 \times 27 = 4 \times (20 + 7) = (4 \times 20) + (4 \times 7) = 80 + 28 = 108$$

1. $9 \times 84 =$ _____

2. $6 \times 29 =$ _____

3. $4 \times 76 =$ _____

4. $8 \times 63 =$ _____

5. $7 \times 95 =$ _____

Write the answers to the story problems.

1. A large grasshopper weighed 0.0174 ounces. The smaller one weighed 0.0156 ounces. They sat on a leaf that weighed 0.0623 ounces. What is the total weight of both grasshoppers?
- _____

2. If the world's richest person has \$69,000,000,000 worth of money and possessions. Does he have 69 thousand, billion, or million?
- _____

3. The second fastest racecar finished a lap around the track in 36.73 seconds. The fastest car finished 6 thousandths of a second earlier. What was its time?

☐ A. 36.724 seconds
☐ B. 36.736 seconds
☐ C. 30.73 seconds
☐ D. 36.13 seconds

4. If 381,754,321,541 is rounded to 380,000,000,000, what place value was it rounded to?
- _____

5. Which number was rounded to 684,000,000,000?

☐ A. 684,564,123,247
☐ B. 683,468,654,612
☐ C. 684,714,472,654
☐ D. 683,843,941,530

6. Joe and his brothers collected jars of grasshoppers in a field to sell for fish bait. They put 8 grasshoppers in a jar. If they sold 1896 grasshoppers, how many jars did they use?
- _____

7. A truck contained 8 boxes of trampolines. Each trampoline weighed 163 pounds. What was the total weight of the trampolines in the truck?
- _____

8. Matt bought a new bicycle helmet for \$29.86 at the bicycle shop. He bought a new seat for the bike that cost \$21.35. How much did he spend?
- _____

9. Peppy's Pizza sold \$947.86 worth of pizzas in one day. The ingredients cost \$351.87. How much money did Peppy have left after paying for the ingredients?
- _____

10. Joe showed the distributive property for 7×63 . Which problem shows a step in showing the distributive property?

☐ A. 420×21
☐ B. $7 + (60 \times 3)$
☐ C. $(7 \times 60) + (7 \times 3)$
☐ D. $7 \times (420 + 21)$

Subtract the decimals

$$\begin{array}{r} 1. \quad 7.8543 \\ - 1.2356 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 6.2476 \\ - 4.992 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 3.121 \\ - 0.863 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 9.447 \\ - 5.331 \\ \hline \end{array}$$

Round addends to the nearest hundred and write the estimated sum in the box. Then add the numbers.

$$\begin{array}{r} 1. \quad \begin{array}{r} 467 \\ 142 \\ + 789 \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \begin{array}{r} 354 \\ 935 \\ + 676 \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \begin{array}{r} 226 \\ 591 \\ + 806 \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{r} 881 \\ 336 \\ + 722 \end{array} \\ \hline \end{array}$$

Copy the problems on another piece of paper to solve. Multiply the decimals to find the products.

$$\begin{array}{r} 1. \quad \begin{array}{r} 542 \\ \times 0.007 \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \begin{array}{r} 0.039 \\ \times 6,117 \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \begin{array}{r} 2.02 \\ \times 327 \end{array} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \begin{array}{r} 8364 \\ \times 0.0004 \end{array} \\ \hline \end{array}$$

Find the quotients to the tenths place.

$$1. \quad 79 \overline{) 5,830.2}$$

$$2. \quad 35 \overline{) 4,021.5}$$

$$3. \quad 62 \overline{) 3,875}$$

$$4. \quad 48 \overline{) 6,374.4}$$

Round to the nearest tenth to estimate the products.

$$\begin{array}{r} 1. \quad 0.7453 \\ \times \quad 9 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 31 \\ \times 0.5746 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 48 \\ \times 0.2345 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 0.3953 \\ \times \quad 56 \\ \hline \end{array}$$

What property is being shown in the problems: associative, commutative, or distributive?
Fill in the correct circle.

1. $6 + 2 + 5 + 8 = 2 + 8 + 5 + 6$ ☐ associative ☐ commutative ☐ distributive

2. $7 \times (18 + 9) = (7 \times 18) + (7 \times 9)$ ☐ associative ☐ commutative ☐ distributive

3. $10 \times 22 \times 35 = (10 \times 22) \times 35$ ☐ associative ☐ commutative ☐ distributive

Answer the questions about exponents. Fill in the circles next to all answers that are correct.
There will be two answers for each exponent.

1. $4^4 =$ ☐ 44 ☐ $4 \times 4 \times 4 \times 4$ ☐ $8 + 8$ ☐ 16×16

2. $2^3 =$ ☐ 6 ☐ 2×4 ☐ $2 \times 2 \times 2$ ☐ $2 + 4$

3. $6^2 =$ ☐ 6×6 ☐ $6 + 6$ ☐ 2^6 ☐ 36

What numbers are divisible by 2, 3, 4, 5, 6, 8, 9, 10? Fill in all the ovals to mark your answers.
There will be more than one answer on each row.

1,104	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 8	<input type="radio"/> 9	<input type="radio"/> 10
66,330	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 8	<input type="radio"/> 9	<input type="radio"/> 10
3,465	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 8	<input type="radio"/> 9	<input type="radio"/> 10
33,345	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 8	<input type="radio"/> 9	<input type="radio"/> 10
26,320	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6	<input type="radio"/> 8	<input type="radio"/> 9	<input type="radio"/> 10

Form a new problem from these multiplication problems using the distributive property and subtraction.

1. $8 \times 67 =$ _____

2. $9 \times 29 =$ _____

3. $4 \times 76 =$ _____

1. A large fish tank held 4,365 fish. Shelly had to choose between dividing the fish into 4, 5, or 9 smaller tanks. She wanted the same number in each tank. What numbers of tanks can she use?
-

5. Felicia wants to estimate the sum of three numbers: $879 + 428 + 394$. Which is the best estimate?

☐ A. 1600
☐ B. 1700
☐ C. 1800

2. A fish weighed 7 kilograms. A kilogram equals 0.4536 pounds. What would be a good estimate of weight of the fish in pounds?

☐ A. about 2.8 pounds
☐ B. about 3.5 pounds
☐ C. about 4 pounds

6. It took 13.96 apples to make one pie. How many apples would be used to make 34 pies?
-

3. How could 400 billion be written as a power of ten?

☐ A. 4×10^{10}
☐ B. 4×10^9
☐ C. 4×10^{11}

7. Mark multiplied a number with 5 decimal places times a number with 2 decimal places. How many decimal places will the product have?

☐ A. 25
☐ B. 10
☐ C. 7

4. Jason can type 57 words a minute on his computer. He typed 4,161 words. How many minutes should that have taken for him to type?
-

8. Three people each bought three boxes of three doughnuts. How would you write an exponent for the number of doughnuts sold?

☐ A. 9^2
☐ B. 6^3
☐ C. 3^3

Add the fractions. Change to least common denominators first.

1. $\frac{4}{7} + \frac{2}{5} = \text{---}$

2. $\frac{5}{12} + \frac{1}{4} = \text{---}$

3. $\frac{5}{14} + \frac{3}{10} = \text{---}$

Subtract the fractions. Change to least common denominators first.

1. $\frac{4}{5} - \frac{7}{20} = \text{---}$

2. $\frac{8}{9} - \frac{1}{6} = \text{---}$

3. $\frac{2}{3} - \frac{2}{11} = \text{---}$

Change the fractions to decimals up to the thousandths place.

1. $\frac{5}{6} = \text{---}$

2. $\frac{2}{9} = \text{---}$

3. $\frac{7}{8} = \text{---}$

4. $\frac{3}{5} = \text{---}$

Find the answers to the problems.

1. $76 + (41 \times 5) = \text{---}$

2. $1253 + (766.1 \div 16.3) = \text{---}$

3. $25 \times (695.7 - 321.6) = \text{---}$

Find the quotients.

1. $0.48 \overline{) 138.72}$

2. $0.67 \overline{) 212.39}$

3. $0.91 \overline{) 683.41}$

4. $0.35 \overline{) 197.75}$

Find the least common multiple.

1. 20 and 25 _____ 2. 12 and 16 _____ 3. 21 and 27 _____ 4. 30 and 12 _____

Write the fractions as percents (%).

1. $\frac{73}{100} =$ _____ 2. $\frac{4}{10} =$ _____ 3. $\frac{7}{1000} =$ _____ 4. $\frac{89}{1000} =$ _____

Write the decimals as percents.

1. 0.65 _____ 2. 0.3 _____ 3. 0.05 _____ 4. 0.0027 _____

Use the number line to find the differences.



1. $7 - 16 =$ _____ 2. $5 - 23 =$ _____ 3. $17 - 30 =$ _____ 4. $15 - 27 =$ _____

Find the discount prices for the dollar amounts.

1. $\$75 - 10\% =$ _____ 2. $\$50 - 33\% =$ _____ 3. $\$25 - 18\% =$ _____

Add price increases to the dollar amounts.

1. $\$67 + 9\% =$ _____ 2. $\$84 + 15\% =$ _____ 3. $39 + 51\% =$ _____

Find the answers to the story problems.

1. A snail raced around a track 176.4 mm long in 4.9 minutes. How many millimeters did it travel in 1 minute?

2. Which answer shows a step in checking for divisibility by 7 for the number 4,606?
☐ A. $460 - 6$
☐ B. $460 - 12$
☐ C. $460 - 14$
3. Which answer shows the product of 42 times the sum of 13 and 9?
☐ A. $(42 \times 13) + 9$
☐ B. $42 + (13 \times 9)$
☐ C. $42 \times (13 + 9)$
4. The aquarium wanted to buy some shark food. 24 lobsters were packaged in a box. 45 fish were packed per box. 40 crab were packed in a box. If the aquarium were to purchase the same amount of each, what is the least number they can buy?

5. A cookie survey was taken and one fifth of the people chose sugar cookies as their favorite. Two-thirds chose chocolate chip. What is the least number of people surveyed?

6. Which problem shows 9% of 60?
☐ A. 0.09×60
☐ B. 0.9×60
☐ C. 9×60
7. Fifty-eight percent of the ingredients of cookies is flour. How many pounds of flour is used to make thirty pounds of cookies?

8. A pair of shoes that costs \$82.00 were on sale for 25% off. What is the sale price of the shoes?

9. The best estimate of 0.087×0.0054 would be
☐ A. 0.0045
☐ B. 0.00045
☐ C. 0.000045
10. To pay for shipping on a pair of shoes, customers added 8% to the cost. If the shoes cost \$70.00, what is the total amount paid?

Find the products.

$$\begin{array}{r} 1. \quad \$478.36 \\ \times \quad 29 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad \$835.69 \\ \times \quad 72 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad \$643.48 \\ \times \quad 53 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad \$921.87 \\ \times \quad 46 \\ \hline \end{array}$$

Write the problems on another piece of paper and find the quotients.

$$1. \quad 81 \overline{) \$754.92}$$

$$2. \quad 17 \overline{) \$215.56}$$

$$3. \quad 96 \overline{) \$723.84}$$

$$4. \quad 35 \overline{) \$305.55}$$

Write the problems in column form and find the sums.

$$1. \quad 95.843 + 142.58 + 67.92 = \underline{\hspace{2cm}} \quad 2. \quad 0.254 + 3.97 + 6.089 = \underline{\hspace{2cm}}$$

$$3. \quad 12.7 + 15.846 + 23.43 = \underline{\hspace{2cm}} \quad 4. \quad 846.501 + 123.18 + 368.096 = \underline{\hspace{2cm}}$$

Find the greatest common factors.

$$1. \quad 9 \quad 27 \quad \underline{\hspace{1cm}} \quad 2. \quad 54 \quad 72 \quad \underline{\hspace{1cm}} \quad 3. \quad 39 \quad 12 \quad \underline{\hspace{1cm}} \quad 4. \quad 25 \quad 150 \quad \underline{\hspace{1cm}}$$

Write the next number in the pattern.

1. 1.5, 3.0, 4.5, 6.0 _____

2. 3.1, 3.2, 3.4, 3.8 _____

3. $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, _____

4. $\frac{2}{64}$, $\frac{3}{32}$, $\frac{4}{16}$, $\frac{5}{8}$, _____

Write the fractions in simplest form.

1. $\frac{40}{12} =$ _____

2. $\frac{60}{28} =$ _____

3. $\frac{66}{10} =$ _____

4. $\frac{55}{45} =$ _____

Subtract the mixed numbers. Regroup fractions when needed. Simplify the answers if possible.

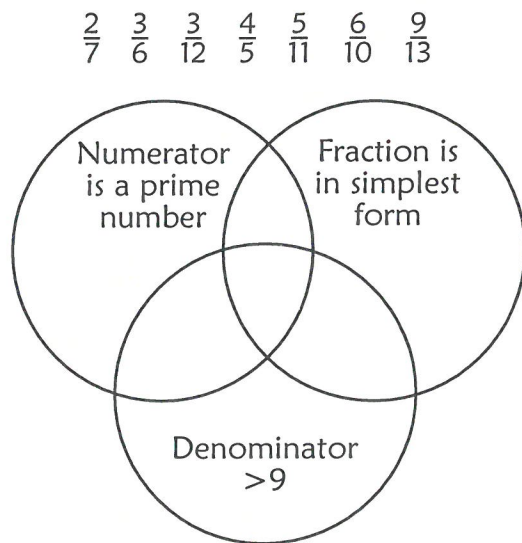
1. $39\frac{2}{8} - 14\frac{1}{2} =$ _____ - _____ = _____ = _____

2. $42\frac{1}{4} - 33\frac{7}{20} =$ _____ - _____ = _____ = _____

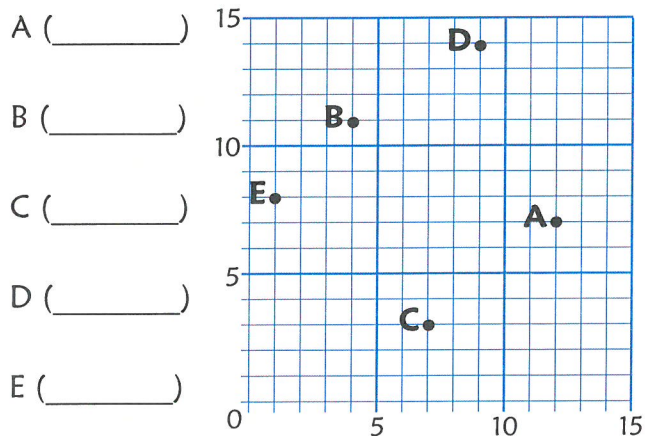
3. $80\frac{2}{9} - 22\frac{7}{18} =$ _____ - _____ = _____ = _____

4. $66\frac{2}{7} - 42\frac{13}{21} =$ _____ - _____ = _____ = _____

Organize the sets of numbers on the Venn diagrams.



Write the coordinates for the points.



1. A case of Blazing Wheels toy cars cost \$96.38. If a toy store sold 68 cases in a year, how much did they make?

2. Jenny simplified the fraction forty-seven ninths by writing it as a mixed number. What was the correct answer?

☐ A. five and two-ninths
☐ B. nine and two-sevenths
☐ C. six and one-third
3. Chester bought 39 cases of bananas for \$623.22. How much did each case cost?

4. Chipper ate five and five-sixths bananas. His sister ate four and two-thirds bananas. How many total bananas did they eat? Write your answer in simplest form.

5. It took five and one-twentieth bananas to make a banana cake. It took three and four-fifths bananas to make banana pudding. How many more bananas did it take to make the cake? Write your answer in simplest form.

6. Sherry changed the fraction thirty-four thirds to its simplest form. What was the numerator?

☐ A. 9
☐ B. 1
☐ C. 3
7. Garret was going to plot points on a graph for the equation $2x - 3 = y$. Which one of the following would not be a coordinate pair for the equation?

☐ A. (4,5)
☐ B. (2,3)
☐ C. (6,9)
8. Beth measured the water drank by mice during a three day period. The first day the mice drank 61.24 milliliters. The second day they drank 51.836 milliliters. The third day they drank 47.957 milliliters. What is the total amount of water they drank?

9. Matt helped his neighbor plant two and four sixths rows of corn and three and six ninths rows of lettuce. Write a problem using simplified fractions. How many rows did they plant?

10. Matt wanted to calculate the value of the corn he grew. If corn sold for \$14.97 for each bag, and he harvested 23 bags. How much was the corn worth?

☐ A. about \$0.65
☐ B. \$314.37
☐ C. \$344.31

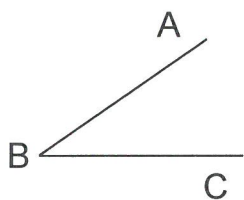
Write the problems on another piece of paper and solve.

1. The difference of 83.45 and 18.67 = _____
2. The sum of 4.92 and 3.47 and 6.32 = _____
3. The product of 192.5 and 2.9 = _____
4. The quotient of 1,806.75 divided by 7.3 = _____
5. The sum of 628.241 and 204.576 = _____
6. The product of 33.5 and 18.7 = _____

Solve the fraction problems. Write answers in simplest form.

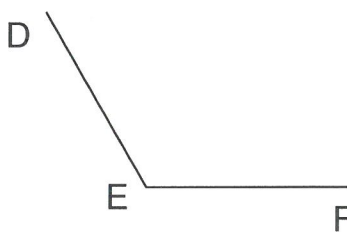
1. $9 \times \frac{3}{4} = \quad =$
2. $4 \times \frac{5}{6} = \quad =$
3. $11 \times \frac{2}{3} = \quad =$
4. $\frac{1}{2} \times \frac{8}{9} =$
5. $\frac{51}{64} \times \frac{16}{17} =$
6. $\frac{5}{8} \times \frac{4}{15} =$
7. $\frac{63}{78} \times \frac{39}{81} =$
8. $\frac{7}{11} \div \frac{35}{44} = \frac{x}{x} =$
9. $\frac{14}{15} \div \frac{3}{5} = \frac{x}{x} =$
10. $\frac{14}{15} \div \frac{2}{3} = \frac{x}{x} =$
11. $\frac{21}{34} \div \frac{28}{51} = \frac{x}{x} =$
12. $10 \div \frac{2}{3} = \quad =$
13. $11 \div \frac{5}{6} = \quad =$
14. $7 \div \frac{4}{9} = \quad =$

Measure the angles and write the type of angle they are (acute, right, obtuse, or straight).



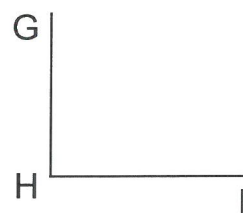
Type _____

Degrees _____



Type _____

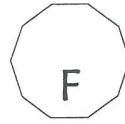
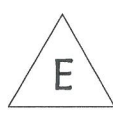
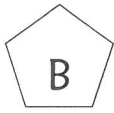
Degrees _____



Type _____

Degrees _____

Match the shapes to the names. Write the letters from the shapes next to the matching name.



quadrilateral _____ nonagon _____ pentagon _____ octagon _____
heptagon _____ decagon _____ hexagon _____ triangle _____

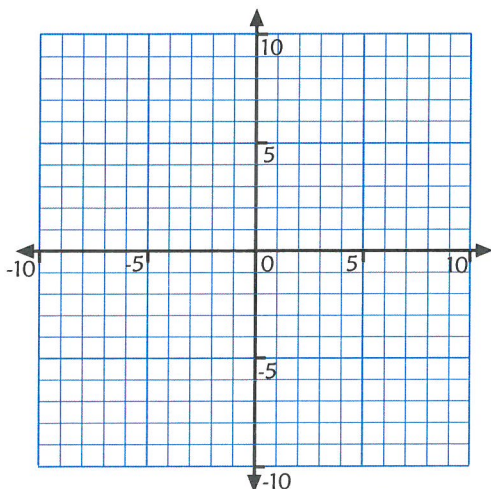
Answer the ratio questions.

- The ratio of pens to pencils in the box is 4:7. If there are 16 pens, how many pencils are there? _____
- The ratio of pairs of shoes to pairs of socks in the closet is 5:11. If there are 15 pairs of shoes, then how many pairs of socks are there? _____
- The bicyclist traveled 240 miles in 12 hours. What is the ratio in simplest form? _____
- The 28 burritos cost 21 dollars. What is the ratio in simplest form? _____

Answer the probability if-then questions.

- If there are 12 counters in a bag and 4 are blue, then what is the probability of drawing a counter that is not blue? _____ Would you be more likely or less likely to draw a blue?
- If 20 people entered a cake baking contest and there are four prizes, then what is the probability of winning a prize? _____ Would you be more likely or less likely to win a prize?
- If 5 of the dozen eggs are not spoiled, then what is the probability of getting a rotten egg? _____ Would you be more likely or less likely to get a spoiled egg?

Find coordinates for two values of x . Plot the points on a grid and connect them to make a line.



$\overleftrightarrow{AB} \quad x + 5 = y$ _____

$\overleftrightarrow{CD} \quad 2x + 3 = y$ _____

$\overleftrightarrow{EF} \quad 4x - 7 = y$ _____

$\overleftrightarrow{GH} \quad 3x - 6 = y$ _____

$\overleftrightarrow{IJ} \quad 4 - x = y$ _____

1. There were 5 brown eggs for every three white eggs. Which ratio is not equal to the brown to white egg ratio?

☐ A. 10 to 6
☐ B. 25 to 15
☐ C. 30 to 20

2. Jack had four fifths of his birthday cake left. He gave one third of that to Jill. What fraction of a whole cake did he give Jill? Write a problem and answer.

3. The cake ingredients cost \$6.94. The children ate 3.8 cakes. How much did the ingredients cost for the amount that was eaten? Write a problem and answer. Round the answer to the nearest cent.

4. Line DE intersects Ray FG at a 90° angle. What is true about the lines? Fill in the circle for all that apply.

☐ The lines intersect at a point
☐ The lines are not parallel
☐ The lines are perpendicular

5. A store giving out samples divided 4 cakes into sixteenths. How many samples did they have to give away? Write a fraction problem and answer.

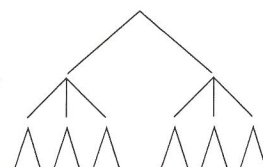
6. The box of cocoa the bakery uses to make brownies cost \$45.36. They can make 37.8 batches of brownies with the box. How much does the cocoa cost in each batch of brownies? Write a problem and answer.

7. The bakery makes milk chocolate brownies and fudge brownies. They have 3 kinds of icings. They can bake them in a heart shape, a circle, and a rectangle. How many combinations of brownies can they make?

☐ A. 8
☐ B. 18
☐ C. 12

8. The ratio of milk to cream in the ice cream mix was 2:5. If Angie used four cups of milk, how many cups of cream did she use?

9. This tree could describe... Fill in an oval for all that are correct.



☐ 2 coin flips and a drawing of 3 objects
☐ blue or green shirt, 3 sizes, with or without a number on the back
☐ two books, paper back or hard back, autographed or not autographed.

10. A shape has 8 sides that are all of equal length. How could this shape be described?

☐ An irregular decagon
☐ An irregular octagon
☐ A regular decagon
☐ A regular octagon

Find the mean of the numbers in each list.

1. (5, 9, 2, 1, 8, 5) _____

2. (24, 28, 20, 28) _____

3. (13, 9, 10, 8, 5,) _____

4. (3, 3, 5, 10, 8, 1, 6, 7, 2) _____

Find the percent off of each number. You may use a calculator.

1. 110 - 30% = _____ 2. 550 - 50% = _____

3. 180 - 85% = _____

Solve the fraction problems. Write the answers in simplest form. Show the steps.

1. $\left(\frac{3}{4} + \frac{1}{6}\right) \times \frac{6}{11} = \left(\quad + \quad \right) \times \quad = \quad \times \quad =$

2. $\left(\frac{1}{2} - \frac{4}{9}\right) \div \frac{2}{9} = \left(\quad - \quad \right) \times \quad = \quad \times \quad =$

3. $\left(\frac{3}{5} \times \frac{2}{3}\right) + \frac{7}{10} = \quad + \quad = \quad + \quad =$

4. $\left(\frac{5}{8} \div \frac{15}{16}\right) - \frac{1}{6} = \left(\quad \times \quad \right) - \quad = \quad - \quad = \quad - \quad =$

Multiply the mixed numbers. Use mental math to write the answers in simplest form.

1. $2\frac{2}{7} \times 4\frac{1}{12} = \quad \times \quad =$

2. $2\frac{5}{8} \times 3\frac{1}{21} = \quad \times \quad =$

Divide the mixed numbers.

1. $4\frac{2}{5} \div 4\frac{1}{8} = \quad \times \quad =$

2. $15\frac{3}{4} \div 11\frac{2}{3} = \quad \times \quad =$

Measure the lengths of the boxes and write the measurement in millimeters, centimeters, and meters.

1. mm = _____ cm = _____ m = _____

2. mm = _____ cm = _____ m = _____

Measure the lengths of the boxes in inches and nearest centimeters.

1. in = _____ cm = _____

2. in = _____ cm = _____

Find the range, median, mode, and mean for the data in the table

Fish	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Length	4	7	8	3	4	10	9	3	4	5	7	3	9	11	3	6

Sort the data _____

range _____, median _____, mode _____, mean _____

Change the units from the first unit to the second.

1. 7 ft = _____ in 2. 21 yd = _____ ft 3. 144 in = _____ ft 4. 21,120 ft = _____ mi

5. 5 mi = _____ yd 6. 180 in = _____ yd 7. 2.3 km = _____ m 8. 54 cm = _____ m

9. 9.3 m = _____ cm 10. 720 mm = _____ cm 11. 6473mm = _____ m

1. Two thirds of a white cake was left and one fourth of the chocolate cake was left. If the leftovers were divided into pieces that were $\frac{1}{8}$ of a full cake, how many pieces could be made? Write a problem and answer using fractions.
-

2. Beth measured two angles in a triangle. The first was 50° and the second angle was 40° . What kind of triangle was it?

☐ A. Obtuse Triangle
☐ B. Right Triangle
☐ C. Acute Triangle

3. For the data 8, 13, 11, 5, 12, 11, 16, 12, 11, the number 11 is the (mark all that are true):

☐ mean
☐ median
☐ mode
☐ range

4. A bag of dog food to feed 3 dogs weighed 4 and one half pounds. There were two and two thirds bags. What was the total weight of the bags. Write a fraction problem and answer.
-

5. Carrie measured a line. The length was halfway between three and three fourths inches and three and a half inches. How long was the line?

☐ $3\frac{5}{8}$ inches
☐ $3\frac{3}{8}$ inches
☐ $3\frac{7}{8}$ inches

6. It took 7 and $\frac{1}{2}$ hours to paint 2 and $\frac{5}{8}$ rooms. How long does it take to paint a room? Write a problem and answer.
-

7. Tom measured two angles in a quadrilateral and found they equaled 90° . What kind of shape could it be?

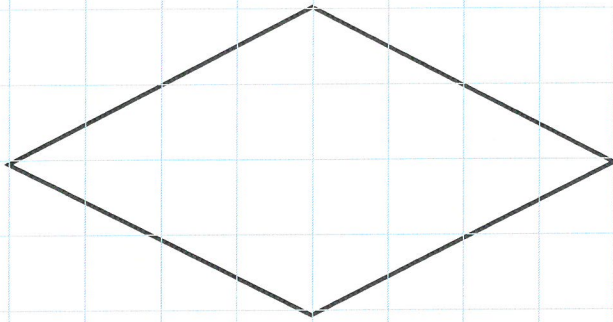
☐ Rectangle
☐ Rhombus
☐ Parallelogram

8. A computer cost 810 dollars. It was on sale for 45% off. There were 23 in the warehouse. What was the sale price of the computer?
-

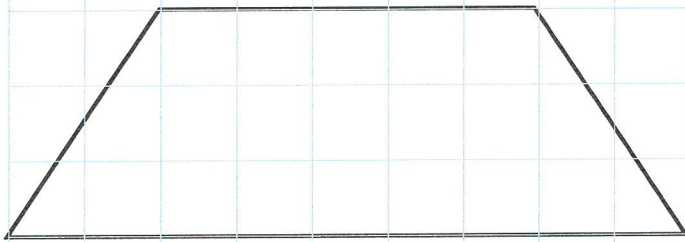
9. A trapezoid had a base of 8 feet and height of 5 feet. The base of triangles that could be made was 1 foot. What is the area of the trapezoid?
-

10. If Keith wanted to subtract 12% from 320, how could he solve the problem? Fill in the ovals for all that apply.

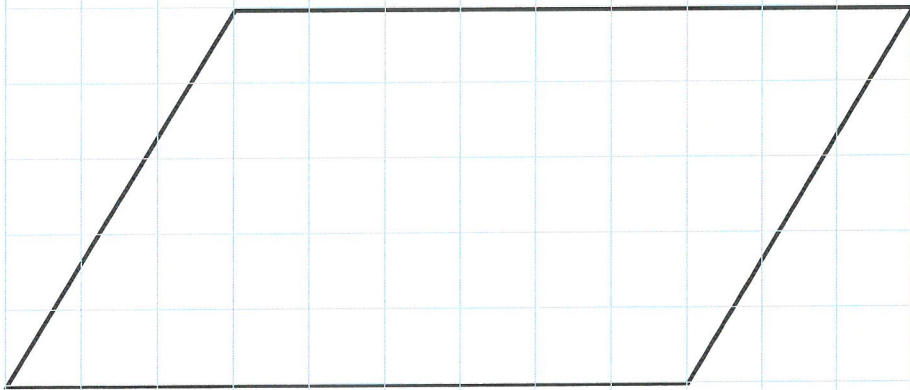
☐ $320 - (320 \times 0.88)$
☐ $320 - 10\% - 1\% - 1\%$
☐ $320 \times (100\% - 12\%)$



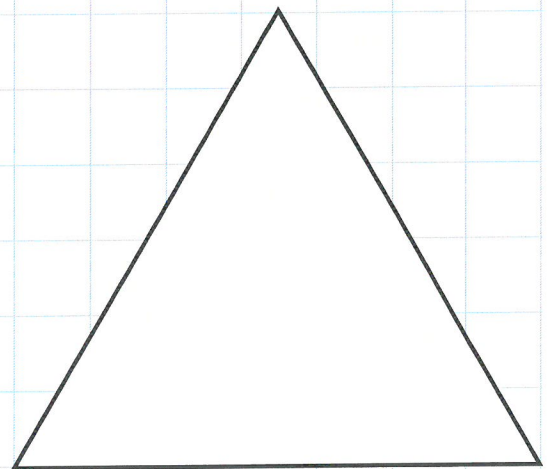
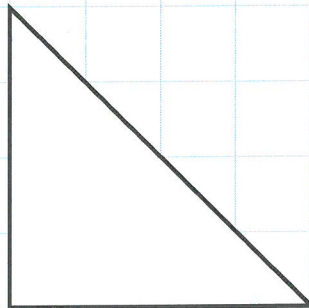
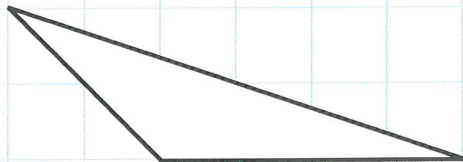
Area
Name



Area
Name



Area
Name



Area

Sides

Angles

Add percentages to each number.

1. $37 + 20\% =$ _____

2. $400 + 110\% =$ _____

3. $280 + 12\% =$ _____

4. $1800 + 30\% =$ _____

Find the fractions of the dollar amounts.

1. $\frac{3}{5}$ off of \$40: How much was saved? _____ What is the new price? _____

2. $\frac{2}{3}$ off of \$63: How much was saved? _____ What is the new price? _____

Multiply the numbers by 11 using mental math. Write the answer on top of the line.

1. 584

2. 1,573

3. 28,762

4. 642,385

Change the fractions to decimals. Round off to the thousandths place.

$\frac{7}{11} =$ _____

$\frac{3}{11} =$ _____

$\frac{8}{11} =$ _____

$\frac{2}{11} =$ _____

Add the fractions and simplify.

1. $\frac{5}{6} + \frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \frac{5}{12}$ _____

2. $\frac{2}{5} + \frac{13}{15} + \frac{1}{6} + \frac{1}{3} + \frac{7}{10}$ _____

3. $\frac{1}{2} + \frac{3}{4} + \frac{11}{12} + \frac{7}{9} + \frac{2}{3}$ _____

4. $\frac{7}{8} + \frac{5}{12} + \frac{5}{6} + \frac{2}{3} + \frac{1}{4}$ _____

Solve the problems for the unknowns. Show your work after the problems.

1. $t \times 8 = 96$ $r =$ _____ solve _____

2. $v - 192 = 89$ $s =$ _____ solve _____

Change the units from the first unit to the second.

1. 64 oz = _____ lb

2. 15,000 lb = _____ ton

3. 900 g = _____ kg

4. 9 ton = _____ lb

5. 9 lb = _____ oz

6. 4.7 kg = _____ g

Add and subtract feet and inches.

$$\begin{array}{r} 1. \quad 17 \text{ ft} \quad 5 \text{ in} \\ + 6 \text{ ft} \quad 9 \text{ in} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 3 \text{ ft} \quad 10 \text{ in} \\ + 8 \text{ ft} \quad 1 \text{ in} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 12 \text{ ft} \quad 5 \text{ in} \\ - 3 \text{ ft} \quad 8 \text{ in} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 8 \text{ ft} \quad 7 \text{ in} \\ - 2 \text{ ft} \quad 3 \text{ in} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 15 \text{ ft} \quad 8 \text{ in} \\ - 7 \text{ ft} \quad 10 \text{ in} \\ \hline \end{array}$$

Add and subtract pounds and ounces.

$$\begin{array}{r} 1. \quad 10 \text{ lb} \quad 12 \text{ oz} \\ + 5 \text{ lb} \quad 7 \text{ oz} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 11 \text{ lb} \quad 9 \text{ oz} \\ + 8 \text{ lb} \quad 15 \text{ oz} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6 \text{ lb} \quad 7 \text{ oz} \\ - 2 \text{ lb} \quad 12 \text{ oz} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 8 \text{ lb} \quad 3 \text{ oz} \\ - 1 \text{ lb} \quad 15 \text{ oz} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 17 \text{ lb} \quad 8 \text{ oz} \\ - 8 \text{ lb} \quad 9 \text{ oz} \\ \hline \end{array}$$

Add and subtract days and hours.

$$\begin{array}{r} 1. \quad 4 \text{ days} \quad 11 \text{ hrs} \\ + 3 \text{ days} \quad 19 \text{ hrs} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 7 \text{ days} \quad 20 \text{ hrs} \\ + 8 \text{ days} \quad 15 \text{ hrs} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 18 \text{ days} \quad 17 \text{ hrs} \\ - 5 \text{ days} \quad 9 \text{ hrs} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 19 \text{ days} \quad 7 \text{ hrs} \\ - 8 \text{ days} \quad 21 \text{ hrs} \\ \hline \end{array}$$

Convert the temperature from the first unit to the second. Use the formulas.

$$1. \quad 68^{\circ} \text{ F} = \underline{\hspace{2cm}}^{\circ} \text{ C}$$

$$2. \quad 140^{\circ} \text{ F} = \underline{\hspace{2cm}}^{\circ} \text{ C}$$

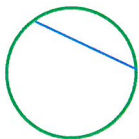
$$^{\circ} \text{ C} = (^{\circ} \text{ F} - 32) \times 5/9$$

$$3. \quad 45^{\circ} \text{ C} = \underline{\hspace{2cm}}^{\circ} \text{ F}$$

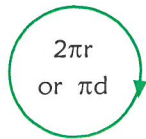
$$4. \quad 130^{\circ} \text{ C} = \underline{\hspace{2cm}}^{\circ} \text{ F}$$

$$^{\circ} \text{ F} = (^{\circ} \text{ C} \times 9/5) + 32$$

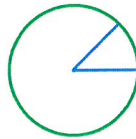
Match the circles to the terms or formulas they represent.



A

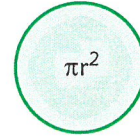


B

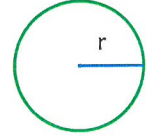


C

D



E



F

1. Circumference _____

2. Radius _____

3. Area _____

4. Diameter _____

5. Central Angle _____

6. Chord _____

Use the formulas for circles to find the missing numbers. Use 3.14 to equal π .

$$c = 2\pi r \quad c = \pi d \quad A = \pi r^2$$

1. The radius of a circle is 20 in. What is the diameter? _____

What is the circumference? _____ What is the area? _____

1. The fudge recipe said to heat the ingredient mixture to 212°F , but the thermometer was in degrees Celsius. How hot should it be in $^{\circ}\text{C}$?
-

6. Peppi weighed his Peppi Super Size Pizza. It weighed 4 pounds. If eight people each had an equal share, how much would their part weigh in ounces?
-

2. A circle was divided into four angles around the center. Three of the angles measured 26° , 74° , and 105° . What did the fourth angle measure?
-

7. There were $3\frac{2}{3}$ pounds of pecan fudge in the candy store. A customer bought $1\frac{7}{8}$ pound. How much was left? Write a problem and answer.
-

3. The box of walnuts weighed $\frac{5}{6}$ of a pound. The peanuts weighed $\frac{7}{8}$ of a pound and the pecans weighed $\frac{2}{3}$ of a pound. What was the total weight of the nuts?
-

8. If Jessica wanted to add 120% to 195, how could she solve the problem? Fill in the ovals for all that apply.

- ☐ 195×2.2
☐ $195 + 195 + (195 \times 0.2)$
☐ $(195 \times 2) + (19.5 + 19.5)$

4. Peppi was asked to cut a pizza slice that was 20% of the pizza. At what angle should he cut a central angle? Show a problem and an answer.
-

9. Gary had three times as much money as Elaine. Which formula would express how the dollar amounts are related? Mark all that will work.

- ☐ A. $E + 3 = G$
☐ B. $E \times 3 = G$
☐ C. $G \div 3 = E$

5. Peppi got $\frac{2}{3}$ the cost off of a bag of cheese that could make 60 pizzas. The cheese would normally cost \$18. How much did Peppi pay?
-

10. Which preserves all the data?

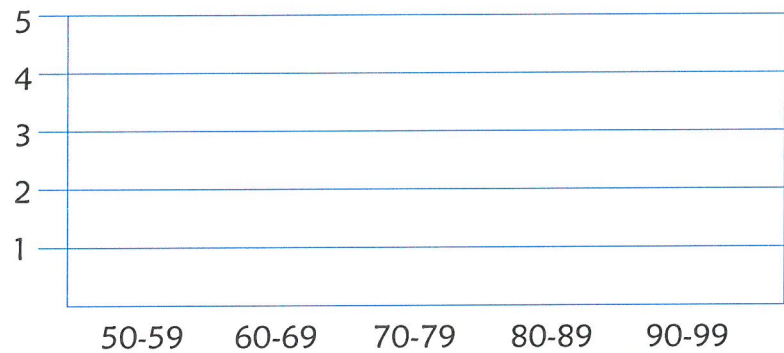
- ☐ A mean
☐ A histogram
☐ A stem and leaf plot

Frozen Yogurt	%	Degrees
Chocolate	45	
Vanilla	30	
Strawberry	20	
Cherry	5	

On another piece of paper draw a 3 inch radius circle. Calculate the degrees for each central angle. Draw the angles to make a circle graph. Label the sections.

Make a stem and leaf plot and then a histogram for the data. Use a ruler to make neat lines. Include a key:

63, 75, 82, 94, 76, 52, 69, 73, 58, 82, 93, 71, 64, 76, 87



Stem	Leaf

Key: _____

