Place Value, Magnitude, Ordering Numbers

Circle or write the correct answer.

1) A local car dealer sold 870 cars last month. He sold 100 MORE cars this month than last month. How many cars did he sell this month? A. 770 B. 870 C. 970 D. 1070	2) In which number does 4 have the GREATEST value? A. 34 B. 43 C. 435 D. 534
3) Name the values of the 3's in 3,345. A. 300; 30 B. 3000; 300 C. 300; 3 D. 30; 3	4) What is the value of the 9 in 12.094? A. nine B. nine tenths C. nine hundredths D. nine thousandths
5) Order the numbers from least to greatest. 4.18 4.5 4.018 0.432	6) El Capitan, in California, is 3,600 feet high. Mt. Morgan is 13,748 feet, Arrowhead Peak is 4,237 feet, and Hawkins Peak is 10,024 feet. List the mountains by height from greatest to least.
7) Which number is equivalent to seventeen thousandths? A. 0.0017 B. 0.017 C. 170 D. 17,000	8) There were 4,504,227 people who came to see soccer matches last year. What digit is in the millions place?

9) Write five million, two hundred seventy-five thousand, three hundred twelve in standard form.	10) Write the number in standard form. 7+0.2+0.05+0.009
11) 5,487,938.87 is written as five million, four hundred eighty-seven, nine hundred eight and eighty-seven hundredths. A. True B. False	12) 4.2 million is written as 42,000,000. A. True B. False
13) 700,000 is ___ times as much as 700. A. 10 B. 100 C. 1/10 D. 1,000	14) 600 is ____ times as much as 6. A. 10 B. 1/10 C. 100 D. 1
15) A large truck can carry as much as 90,000 pounds, but a small truck can carry only 1/10 of that weight. How many pounds can the small truck carry?	16) The southern United States has about 5,000,000 American alligators. About 1/10 of those alligators are in Texas. About how many alligators are in Texas?
17) How should you write 10.067 in expanded notation? A. 10 + 6/100 + 7/1000 B. 1 + 6/10 + 7/100 C. 100 + 60 + 7 D. 1 + 6/100 + 7/100	18) What is the correct expanded notation of 63.243? A. 60 + 3 + 2/1 + 4/10 + 3/1000 B. 60 + 3 + 2/10 + 4/100 + 3/1000 C. 60 + 3 + 2 + 4 + 3 D. 63 + .243

19) The following are annual rainfall totals for cities in New York:
     Rochester 0.97 meters
     Ithaca 0.947 meters
     Saratoga Springs 1.5 meters
     New York City 1.268 meters
List the rainfall measurements in order from least to greatest.
	20) Choose the standard form.
	$(4\times10^7)+(9\times10^5)+(7\times10^2)$
	
	 A. 4,900,700
	 B. 40,900,700
	 C. 400,900,700
	 D. none of these

Computation – Addition and Subtraction Whole numbers

Solve each problem. Show all your work. You can use the standard algorithm or an alternative strategy. NO CALCULATORS.

1) 24 + 37	2) 128 - 59	3) 4,256 + 3,414
4) 252 + 442 + 253	5) 984 + 236	6) 863 – 435
7) 6,371 – 2,483	8) 400 - 96	9) 67 + 45
10) 676 - 223	11) 1,706 - 428	12) 216,345 + 78,472

Computation – Multiplication and Division Whole Numbers

Solve each problem. Show all your work. You can use the standard algorithm or an alternative strategy. NO CALCULATORS. Write your answer on the line.

1) 655 ÷ 5	2) 68 x 5
3) 207 x 9	4) 2,984 x 3
5) 74 x 36	6) 301 ÷ 7
7) 912 ÷ 38	8) 10,320 ÷ 20

Whole Numbers – Problem Solving

Solve the problems using the 4-step Plan. Show all your work, labeling each step and labeling your answer with the correct units.

1) After shopping for school supplies, Martin came home with $4. He bought a pack of pens for $6, a calculator for $12, and a notebook for $3. How much money did he start with?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

2) Julio increases the laps he runs by three laps each day. If he begins on Monday running 4 laps, how many laps will he run on Wednesday at his current rate?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

3) The Delgado family is buying a pool that is 30 feet x 30 feet for $1,188. They plan to pay in 12 equal payments. Find the amount of each payment.

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

4) James builds and sells furniture. Last month he sold 9 bookcases and 6 coffee tables. If each bookcase costs $310, and each coffee table costs $275, how much did James make?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

Distributive Property

Distributive Property - when you multiply the sum of two or more addends by a factor, the product is the same as if you multiplied each addend by the factor and then added the partial products.	**Example** $$3 \times (2 + 6) = (3 \times 2) + (3 \times 6)$$ $$3 \times 8 = 6 + 18$$ $$24 = 24$$
Note: • The Distributive Property allows us to solve multiplication problems using *partial products* and *partial products revised*. • The Distributive Property does **not** work for division	

Rewrite each problem using the Distributive Property and then solve. Show all your work.

1) $5 \times (14 - 3)$	2) $7 \times (2 - 1)$
3) $6 \times (14 + 2)$	4) $9 \times (3 + 4)$
5) Ray needs to multiply 5×26 to find the area of a rectangle. Fill in the blanks using the Distributive Property and then solve. $$5 \times 26 = 5 \times (\underline{\hspace{1cm}} + 6)$$	6) If Brian drinks an average of 16 glasses of juice per week for 9 weeks, he will drink about 16 x 9 glasses of juice. Which of the following is equal to 16 x 9? A. $(10 + 9) - (6 + 9)$ B. $(10 \times 9) + (6 \times 9)$ C. $(10 \times 9) \times (6 \times 9)$ D. $(10 + 9) \times (6 + 9)$

Decimals – Adding and Subtracting

RULE	EXAMPLE
• Line up the decimal points • Add zeros if necessary • Add or subtract NOTE: Remember to bring down your decimal point into your answer!	33.4 – 3.82 $\begin{array}{r} 33.40 \\ -3.82 \\ \hline 29.58 \end{array}$

Find each sum or difference. Show your work.

1) 5.30 + 1.76 + 4.079	2) 2.341 - 1.51	3) 2.462 + 6.90 + 3.189
4) $11.11 – $4.88	5) $100.80 + $5.87	6) 100.38 - 16.653
7) 8,893.179 + 1,800.469	8) 4,267.184 – 3,960.813	9) 6,350.538 – 4,319.199

Adding and Subtracting Decimals – Problem Solving

Solve the problems using the 4-step Plan. Show all your work, labeling each step and labeling your answer with the correct units.

1) Noah measured the length of three pieces of cloth. The measurements were 4.29 ft, 3.6 ft, and 2.34 ft. What was the total length of the three pieces of cloth?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER	
I found out that . . .	

2) Doreen has $20. She wants to buy a pair of earrings that costs $7.58 and a necklace that costs $13.36. Does Doreen have enough money?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

3) Hannah was subtracting the number 4.576 from the number 9.2. Her answer was 4.776. Is this answer correct? If not, what is the correct answer?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

4) Robert bought one 4.5-lb bag of dog food for $3.89, a 7.5-lb bag of cat food for $6.69, and two 2.3-lb bags of birdseed for $1.89 each. How much did he pay for the animal food?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

Order of Operations

One acronym for remembering the order of operations is **PEMDAS**. A popular expression for remembering this is **P**lease **E**xcuse **M**y **D**ear **A**unt **S**ally.

P – parentheses

E – exponents

M – multiplication

D – division

These operations are equal. Moving left to right they are solved in the order they occur.

A – addition

S – subtraction

These operations are equal. Moving left to right they are solved in the order they occur.

Another acronym for remembering the order of operations is **GEMS**.

G – groupings (parentheses, brackets, braces)

E – exponents and roots

M – multiplication/division – moving left to right as they occur

S – subtraction/addition – moving left to right as they occur

---

Find the numerical value of the following expressions using the correct order of operations. Show your work step-by-step.

1) 23 + 5.6 x 2 = _____	2) 2 × (4 + 7) − 6 = _____

3) 22 ÷ 11 + 12 – 3 = _____	4) 7 × 6 ÷ 2 + (9 - 4) = _____
5) 12 + 6 – 4 ÷ (2 + 5) = _____	6) 8 + 32 × (20 - 10) = _____
7) 7 x (7 – 4) + 6 = _____	8) 10 – (2 + 6) ÷ 2 - 1 = _____
9) Ted evaluated the expression 2 + 4 × 6. What was his answer?	10) Frank evaluated the expression 82 - (2 × 6 + 3). What was his answer?

Unit Price

Rates are special ratios where the two things being compared have different units. **Unit Price** is the cost of a single unit. For example, we could compare the price of purchasing things to the number of things bought. An example of a rate would be $16 for 8 red peppers. This rate can be used to find the unit price.

$$\text{Example:} \quad \frac{\$16}{8 \text{ peppers}} = \frac{16 \div 8}{8 \div 8} = \frac{2}{1} = \$2 \text{ per pepper}$$

Find the unit price of each item described. Show all your work.

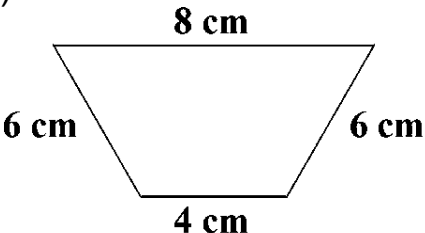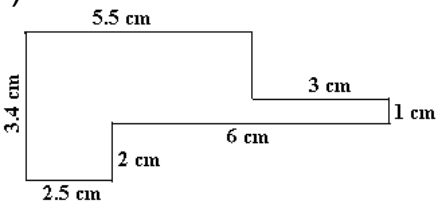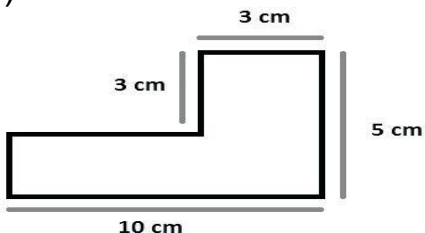| 1) 5 doughnuts for $4.50	2) 36 oz of peanut butter for $4.32	3) 4 lb. of cheese for $8.36
_____ per doughnut	_____ per ounce	_____ per pound
4) 10 issues of a magazine for $28.90	5) 5 lb. of potatoes for $2.25	6) 25 greeting cards for $31.25
_____ per issue	_____ per pound	_____ per card

Geometry Connection
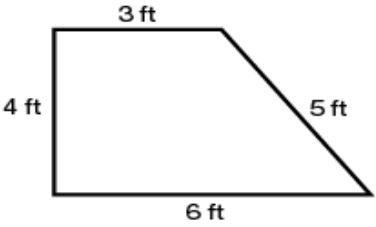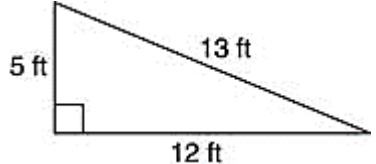
Answer each question.

1) How many sides does a hexagon have?	2) What is the measure of each angle of a rectangle?
3) Name 4 different quadrilaterals.	4) Explain what parallel means.

5) All the sides of this triangle are equal. What kind of triangle is it?
 	
    A. scalene   B. isosceles
 	
    C. equilateral   D. right triangle
	6) Which polygon has 4 sides?
	
	    A. pentagon B. hexagon
	
	    C. octagon D. quadrilateral

7) Which of the following groups is a square not a member of?
 	
    A. quadrilateral   B. parallelogram
    C. trapezoid   D. rectangle
	8) Arrange the following polygons in order from least to greatest number of sides.
	
	  hexagon, triangle, decagon, pentagon

9) Select the statements that are true. A. a parallelogram is a quadrilateral with opposite sides parallel B. a rectangle is a square and a polygon C. a square is a rhombus D. a trapezoid is a parallelogram	10) How are a square and a rhombus alike? A. both have right angles B. both have acute angles C. both have 4 sides with different lengths D. both have 4 sides that are equal in length
11) Define each of the following angles: obtuse – acute – right –	12) Draw one example of a polygon and one example that is not a polygon. Label you figures.

Geometry Connection: Perimeter

Remember: perimeter refers to the sum (+) of all of the outside edges of a figure.
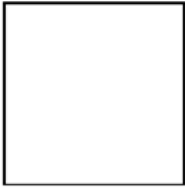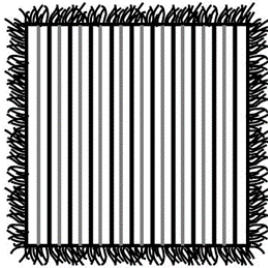
Find the perimeter of each figure shown or described below. Show all your work. Be sure to include the correct units in your answer.

1)	2)	3)
3 ft / 4 ft / 5 ft / 6 ft	5 cm / 3 cm	5 ft / 13 ft / 12 ft

4)	5)	6)
8 cm / 6 cm / 6 cm / 4 cm	5.5 cm / 3.4 cm / 3 cm / 1 cm / 6 cm / 2 cm / 2.5 cm	3 cm / 3 cm / 5 cm / 10 cm

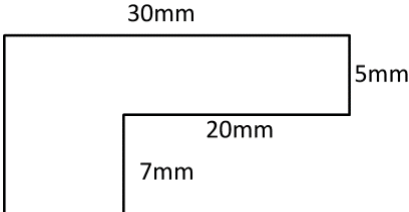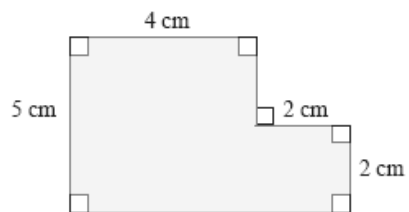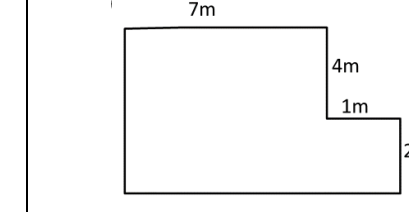| 7) Find the perimeter of a square with side $14\frac{1}{2}$ inches.	8) Find the perimeter of a triangle with sides 4 inches, $8\frac{1}{2}$ inches, and $9\frac{1}{4}$ inches.	9) Find the perimeter of a rectangle: l = 6 yards w = 4 yards.

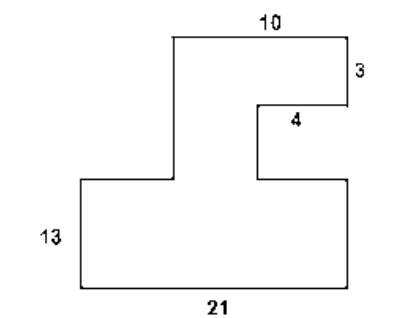# Geometry Connection: Area
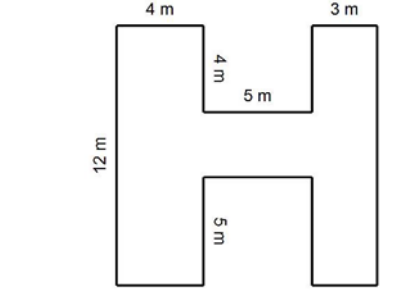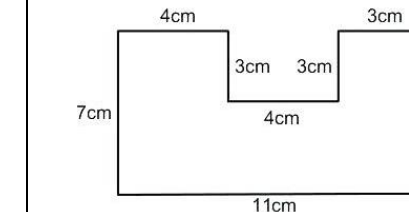
Area Formulas	
Square: $A = s^2$	Rectangle: $A = l \cdot w$
Remember: Area is measured in square units or units²	

Find the area of each figure. Show all your work (write the formula, substitute numbers and calculate). Make sure you include the correct units in your answer.

1) 8 yards 3 yards	2) 10 cm 10 cm	3) A rectangle with a length of 13 meters and a width of 5 meters.
4) A square with sides measuring 9 ft.	5) Felicia wants to clean the square rug in her room. She buys carpet cleaner that will clean 40 ft². Find the area of her rug. Will she have enough carpet cleaner? 6 feet	

Area of Composite Shapes

Find the area of each figure. Show all your work (draw lines to decompose the shape, write the formula, substitute numbers and calculate). Make sure you include the correct units in your answer.

1)

30mm

5mm

20mm

7mm

2)

4 cm

5 cm

2 cm

2 cm

3)

7m

4m

1m

2m

4) Measurement in inches.

10

3

4

13

21

5)

4 m

3 m

4 m

5 m

12 m

5 m

6)

4cm

3cm

3cm

3cm

7cm

4cm

11cm

Geometry Connection: Prisms

- The surface area of a three-dimensional figure is the sum of the areas of all its faces. Surface area is measured in square units or units^2.
- Volume is the amount of space inside a three-dimensional figure.
- Volume = Length × Width × Height. Volume is measured in cubic units or units^3.

Find the surface area or volume of each rectangular prism. Round decimal answers to the nearest tenth. Show all your work.

1) Find the volume.	2) Find the surface area.
32 cm 15 cm 18 cm	7 in. 7 in. 9 in.
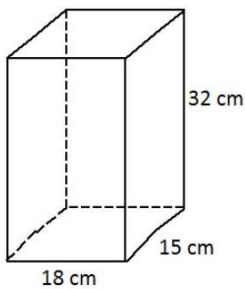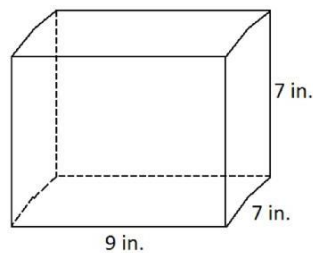
3) Find the surface area.	4) Find the volume.
8 cm 8 cm 8 cm	10 cm 10 cm 10 cm
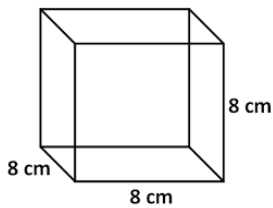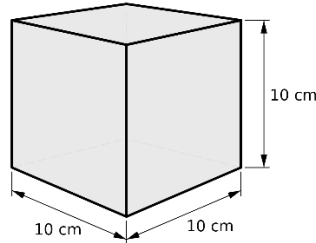
5) Find the surface area.

6 mm
6 mm
5 mm
15 mm
9 mm
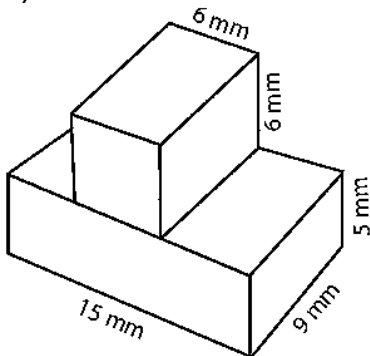
Geometry – Problem Solving

Solve the problems using the 4-step Plan. Show all your work, labeling each step and labeling your answer with the correct units.

1) The playing area of a college's football field measures 100 yd by 53 yd. How much area does the football team have to play on?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

2) The perimeter of a rectangular playground is 46 m. If the length of the park is 7 m, what is the width of the park? (Remember: the formula for perimeter is 2 x length + 2 x width)

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

3) Charles has a rectangular flower garden that is 5 yd long and 12 yd wide. One bag of fertilizer can cover 6 yd^2. How many bags will he need to buy to cover the entire garden?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

4) Mr. and Mrs. Wilkes want to make a patio in their yard. The patio will be 15 ft long and 10 ft wide. Each patio tile covers 1 square ft and costs $2. How much will they spend on patio tiles?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

Prime and Composite Numbers

All whole numbers above 1 are either composite or prime.
- **Prime number** - a whole number greater than 1 that cannot be made by multiplying other whole numbers; the only factors are 1 and itself
- **Composite number** - a whole number that can be made by multiplying other whole numbers; it is a Composite Number when it can be divided exactly by a whole number other than itself.
- Not 1 - years ago 1 was included as a Prime, but now it is not: *1 is not Prime and also not Composite*
- **Factors** are numbers we multiply together to get another number.

Answer each question completely. Show all your work.

1) Is 28 a prime or composite number. Explain your answer.	2) Is 11 a prime or composite number. Explain your answer.	3) Is 72 a prime or composite number. Explain your answer.
4) Is 36 a prime or composite number. Explain your answer.	5) Is 23 a prime or composite number. Explain your answer.	6) Is 7 a prime or composite number. Explain your answer.
7) There are 13 flavors at a local ice cream parlor. Is the number 13 a prime number or a composite number? Explain	8) Cruz and his friend, Penny, are identifying prime and composite for a homework. Cruz says that the number 5 is a composite because it has the factors 2 and 2.5. Explain what is wrong with his reasoning.	

Prime Factorization

Prime Factorization is finding which prime numbers multiply together to make the original number.	
Factor Tree Method - find any factors of the number, then the factors of those numbers, etc., until you can't factor any more.	

Example: Find the prime factors of 48	
Write the number 48	
48 = 8 × 6, so we write down "8" and "6" below 48	
Now we continue and factor 8 into 4 × 2	
Then 4 into 2 × 2	
And lastly 6 into 3 × 2	
We can't factor anymore, so we have found the prime factors.	Solution: 48 = 2 × 2 × 2 × 2 × 3 or 48 = 2^4 × 3 using exponents

Solve the problems. Show all your work. Express your answer 2 different ways.

1) Find the prime factors of 75	2) Find the prime factors of 96
75 = Exponential form:	96 = Exponential form:
3) Hope used a factor tree to factor the number 240. Show what her tree looked like.	4) Jesse drew a factor tree for 1200 and ended up with 4 × 4 × 5× 5 × 3 as the prime factorization. Explain what is wrong with this factorization. What is the correct prime factorization?
240 = Exponential form:	1200 = Exponential form:

Finding Factors/Greatest Common Factor

Rainbow Method – begin with the smallest prime number; write the larger factor on the other end; continue until you meet in the middle

Example: Find the factors of 48	
Write the number 48 followed by a colon	48:
Start with 1 x 48	48: 1, 48
Next 2 x 24	48: 1, 2, 24, 48
Next 3 x 16	48: 1, 2, 3, 16, 24, 48
Next 4 x 12	48: 1, 2, 3, 4 12, 16, 24, 48
5 does not work, next 6 x 8	48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
7 does not work. We already have 8, so we have the solution.	48: 1, 2, 3, 4, 6, 8, 12, 16, 24, 48

Find the factors for the following numbers. Show your work.

1) 32	2) 60
3) 18	4) 24

Greatest Common Factor (GCF) - the greatest number that is a factor of two (or more) other numbers, GFC is useful for simplifying fractions or finding equivalent fractions

Finding the Greatest Common Factor	12: 1, 2, 3, 4, 6,12
1) find all factors of both numbers	16: 1, 2, 4, 8, 16
2) then find the ones that are common to both, and	Common factors: 1, 2, 4
3) then choose the greatest	GFC: 4

Find the GCF for the following numbers. Show your work.

1) 18 and 64	2) 36 and 64
Common factors: GCF:	Common factors: GCF:
3) 56 and 63	4) 45 and 75
Common factors: GCF:	Common factors: GCF:

Least Common Multiple/Equivalent Fractions

Least Common Multiple (LCM) - the smallest positive number that is a multiple of two or more numbers; also called Lowest Common Multiple; LCM is useful for finding common denominators	
Finding the Least Common Multiple 1) list the multiples of each number 2) find the first common value	4: 4, 8, 12, 16, . . . 6: 6, 12, 18, . . . LCM: 12

Find the LCM for the following numbers. Show your work.

1) 8 and 6	2) 4 and 22
3) 14 and 28	4) 16 and 24

• **Equivalent Fractions** have the same value, even though they may look different   • You can make equivalent fractions by multiplying or dividing both top and bottom by the same amount   • You only multiply or divide, never add or subtract, to get an equivalent fraction
The rule to remember is: *"Change the bottom using multiply or divide,*   *And the same to the top must be applied"*

Solve the problems. Circle or write the answer. Show your work.

1) Which two fractions are equivalent to $^4/_5$? A) $^{10}/_{12}$ and $^{15}/_{20}$ B) $^{20}/_{25}$ and $^{50}/_{60}$ C) $^{15}/_{18}$ and $^{25}/_{30}$ D) $^{24}/_{30}$ and $^{28}/_{35}$	2) Find 2 equivalent fractions for $^8/_{16}$.

Fractions – Adding and Subtracting

RULE	EXAMPLE
Denominators the same • Add or subtract the numerators • Write the sum or difference over the denominator • Reduce the fraction, if necessary	$^2/_8 + {}^4/_8 = {}^6/_8$ $^6/_8 = {}^3/_4$
Denominators are different • Find the least common denominator (LCD) using least common multiple • Write equivalent fractions using the LCD • Finish solving using the steps above	$^5/_6 + {}^3/_8$ LCD = 24 $^5/_6 = {}^{20}/_{24}$ $\quad$ $^3/_8 = {}^9/_{24}$ $^5/_6 + {}^9/_{24} = {}^{29}/_{24}$ $^{29}/_{24} = 1\ {}^5/_{24}$

Find each sum or difference. Show your work.

1) $^2/_8 + {}^3/_8 =$	2) $^1/_6 + {}^2/_5 =$	3) $^7/_9 - {}^2/_9 =$
4) $^3/_4 - {}^5/_{12} =$	5) $^2/_5 + {}^3/_{10} =$	6) $^3/_4 - {}^1/_3 =$

Histograms

A **histogram** is a graph that shows how many items occur between two numbers.

The Springfield Library has books arranged by grade level.

Springfield Library

Number of Books (vertical axis: 0, 100, 200, 300, 400)

Grade of Reader (horizontal axis: K-2, 3-5, 6-8, 9-11, 12 or Over)
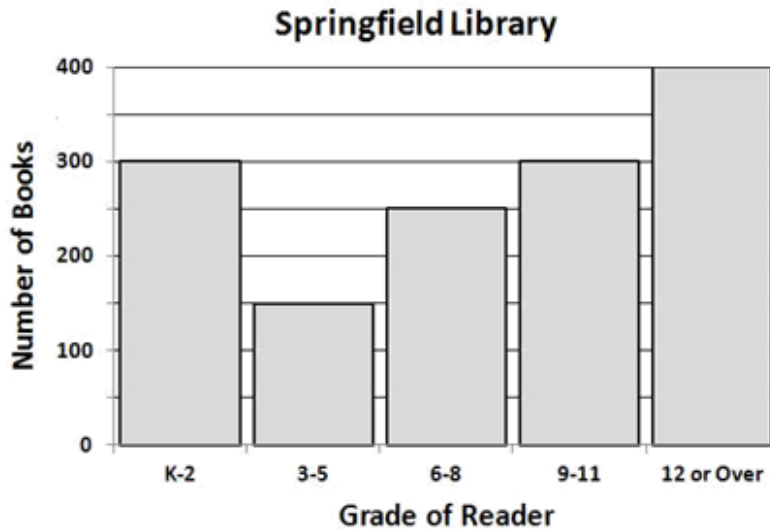
Use the histogram above to answer each question. Show all your work for numbers 4-6.

|		
1) How many books are there for grades 3-5?	2) Which grade levels have the greatest number of books?	3) Which grade levels have the fewest number of books?
4) How many books are there for students in grade 6 and above?	5) How many books are in the Springfield Library?	6) What is the difference in the number of books for K-2 and the number of books for adults?

Bar Graph

A **Bar graph** is a graph drawn using rectangular bars to show how large each value is. The bars can be horizontal or vertical

Tom conducted a survey of his classmates. The results of his survey are represented by the graph below.

What kind of pet do you own?
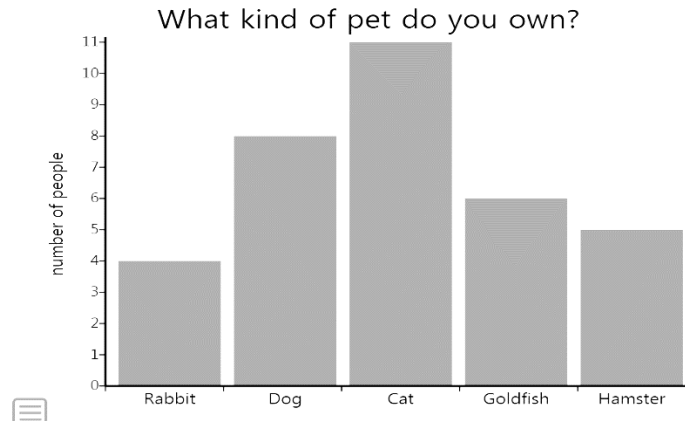
Use the bar graph above to answer each question. Show all your work for numbers 4-6.

1) Which pet is owned by the least number of students?	2) Which pet is the most popular?	3) How many students own a goldfish?
4) What is the difference between the number of students owning cats and the number owning dogs?	5) What is the total number of students owning a pet that is not a dog or cat?	6) List the pets in order from least to greatest in popularity.

Line Plots

A **Line Plot** is a graphical display of data showing the frequency of an item.

Sue surveyed her classmates to find out how many candy bars they ate in a week. She displayed her data in a line plot.

Candy Bars

```
Number of Students

                        X
                X       X
                X       X   X           X
        X   X   X   X   X   X   X   X
        ────────────────────────────────
    0   1   2   3   4   5   6   7   8
              Number of Candy Bars
```
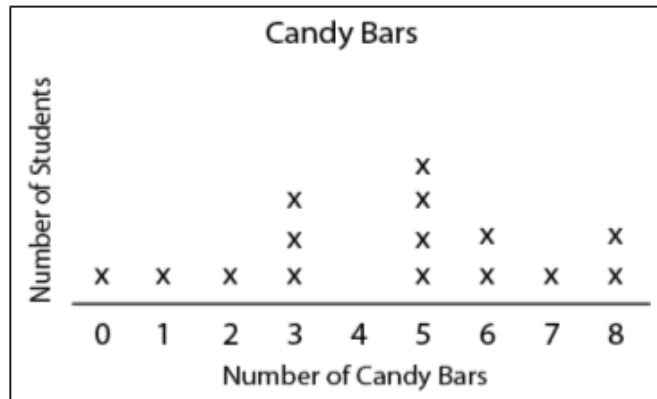
Use the line plot above to answer each question. Show all your work for numbers 4-6.

1) How many students ate 5 candy bars?	2) Which is the least frequently eaten number of candy bars?	3) How many students did Sue survey?
4) How many students ate 5 or more candy bars?	5) How many students ate 3 or fewer candy bars?	6) What is the total number of students eating 3 or 5 candy bars?

Problem Solving

Solve the problems using the 4-step Plan. Show all your work, labeling each step and labeling your answer with the correct units.

1) Marge went on a trip to New York City and spent a total of $200 going to the theatre. She purchased 4 student tickets for Broadway plays that cost $25 each and five discount tickets. Find how much each discount ticket cost.

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER	
I found out that . . .	

2) Jack bought 10 shirts, 3 sweaters, and 5 pants. If he paid with eight 20-dollar bills, how much change will he get back?

Item	Cost
shirt	$6
sweater	$8
pants	$11

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER	
I found out that . . .	

3) One week, Jim received his usual $25 allowance. He spent his usual $10 for lunches and $2 to ride the bus. Jim also bought a DVD for $18. How much money did Jim need to borrow to buy the DVD?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .

4) Rey has $5 in change after buying a hamburger for $3.50 and a drink for $1.50. How much money did Rey have originally?

READ	
I know that . . .	I need to find out . . .

PLAN	
Create a Representation (picture, diagram, table)	I will choose the problem-solving strategy . . .

SOLVE	CHECK
Show your work	My answer is reasonable because . . .

FINAL ANSWER
I found out that . . .