

# Spiral Review 1

No calculators. Must show work.

1)  $76.19 + 3.472$

2)  $37.62 - 9.285$

3)  $7.03 \times 8.9$

4)  $\frac{27.36}{.6}$

5) Raquel was working at a frozen yogurt store. Each serving is  $\frac{1}{12}$  of a gallon. The machine only has  $1\frac{1}{2}$  gallons left. How many more servings are left in the machine?

6) Complete the ratio table:

Number of Teachers	1		4	
Number of students	22	44		242

# Spiral Review 1

No calculators. Must show work.

7) A gigabyte of data costs \$12.50 on a cell phone plan. How much will 3.25 gigabytes cost?

8) Select ALL ratios equivalent to 3: 7

- a. 6: 21
- b. 9: 21
- c. 15: 35
- d. 70: 30

9) Tyron is buying candy. He has two options. Which is the better buy? Why?

**Deal A:** 5 pieces for \$.75

**Deal B:** 12 pieces for \$2.00

10) Sherry traveled 20 miles in 4 hours on her bike. Assuming she traveled at a constant speed, how far did she travel each hour?

# Spiral Review 2

No calculators. Must show work.

1)  $90 - 15.23$

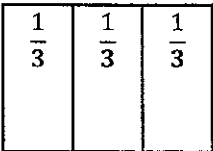
2)  $4.5 \times .03$

3)  $16.5 \div .05$

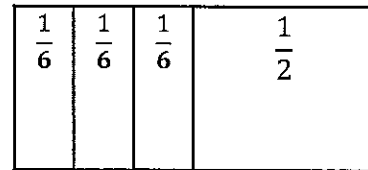
4)  $45.3 + 4.581$

5) Which model correctly shows how 3 people share  $\frac{1}{2}$  of a candy bar? Explain in words what the each model shows.

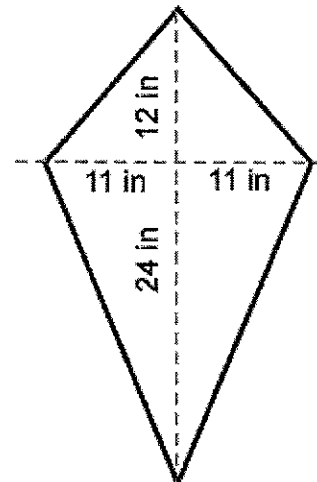
**Model A:**



**Model B:**



6 ) Jon needs paper to cover his kite. Find the area of his kite.



# Spiral Review 2

No calculators. Must show work.

7) Evaluate:

$$56 - (7 + 4^3 \div 4)$$

8) Sara is saving for a new phone. She saves the same amount each month. She saves \$222 in a year. How much did she save each month?

9) Two expressions are given:

$$\begin{array}{l} -7 + 2y \\ 14 - 6p \end{array}$$

Which set of numbers represent the coefficients?

a. {}   b. {-7, 14}   c. {-6, 2}   d. {-7, -6, 2, 14}

10) Jyshaun divides a positive number by  $\frac{7}{4}$ . What is the result?

## Part 1:

Give an example:

## Part 2:

Which will always be the case?

- The quotient is larger than the starting number.
- The quotient is smaller than the starting number.

# Spiral Review 3

No calculators. Must show work.

1)  $3 \div 4$

2)  $5.34 \times 2.7$

3)  $.04 + 100.57$

4)  $12.34 - 6.07$

5) There is  $\frac{4}{5}$  of a gallon of juice left. If each glass holds  $\frac{1}{10}$  of a gallon. How many glasses of juice are left?

Part 1:

Part 2: Draw a model to represent the answer

- a. 5    b. 8    c. 12    d. 15

6) Which statement is correct?

- a. A temperature of  $15^\circ\text{C}$  represents a temperature of  $15^\circ\text{C}$  below 0  
b. A temperature of  $-15^\circ\text{C}$  represents a temperature of  $15^\circ\text{C}$  below 0

# Spiral Review 3

No calculators. Must show work.

7) Place one point for each number to show its position on the number line.

$$4, \quad -\frac{3}{2}, \quad \frac{9}{2}, \quad -\frac{15}{4}$$



8) Jorge wants to find which detergent is the best deal. Determine which detergent has the best price per fluid ounce.

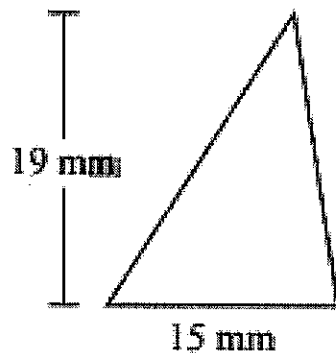
Tide	Gain	Downy
50 fl oz \$6.59	30 fl oz \$4.99	48 fl oz \$7.50

- a. Tide
- b. Gain
- c. Downy

9) Insert parenthesis to make the value of the expression 16.

$$4 + 6 \times 9 - 5 \div 2$$

10) Find the area.



# Spiral Review 4

No calculators. Must show work.

1)  $7.8 \times .19$

2)  $70 - 12.45$

3)  $5.784 + 56.43$

4)  $\frac{30.78}{.9}$

5)  $2\frac{2}{3} \div \frac{1}{2}$

6) Which expression correctly factors out the greatest common factor in  $48 + 36$  using the distributive property?

a.  $4(12 + 9)$

b.  $5(9 + 7)$

c.  $12(4 + 3)$

# Spiral Review 4

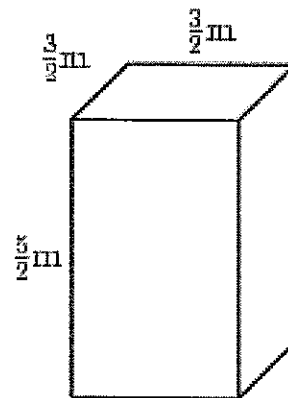
No calculators. Must show work.

7) Given the expression  $2x + 4y$ , evaluate when  $x = \frac{1}{2}$  and  $y = 3.2$

8) Select all expressions equivalent to  
 $4(3x - 2) + 5x$

- a.  $12x + 4 + 2$
- b.  $17x - 8$
- c.  $12x - 8 + 5x$
- d.  $7x - 2 + 5x$

9) Given the lengths of the rectangular prism shown, how many cubes with  $\frac{1}{2}$  m lengths will fit in the rectangular prism?



10) Solve for x.

$$x \div \frac{1}{2} = 10$$



# Spiral Review 5

No calculators. Must show work.

1)  $15.07 + 9.174$

2)  $100 - 15.08$

3)  $.12 \times .78$

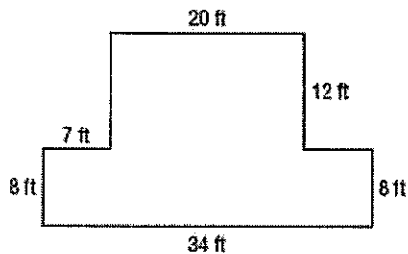
4)  $\frac{7}{8}$  (Divide, leaving answer as a decimal)

5) Laci has 6 yards of fabric. She need  $\frac{1}{2}$ -yd for each blanket she makes. How many blankets can she make?

6)

## Part 1

Find the area of the composite figure shown.



## Part 2

The figure shown is the floorplan of a kitchen. If tiles cost \$2 per 1 square foot tile and you want to cover the entire floor in tile, how much will you spend on tile?

# Spiral Review 5

No calculators. Must show work.

7) 23 of Rapheal's 52 movies are comedies. What does the ratio 23:29 represent?'

- a. The number of comedies to all movies.
- b. The number of comedies to other movies.
- c. The total movies to comedies.

## 8) Part 1

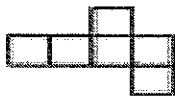
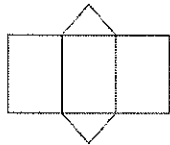
Select all expressions that show a correct method to calculate 18% of 150.

- a.  $18 \cdot 150$
- b.  $0.18 \cdot 150$
- c.  $\frac{18}{100} \cdot 150$
- d.  $\frac{0.18}{100} \cdot 150$

## Part 2

What is 18% of 150?

9) Draw a line to match the net to its 2-dimensional figure.



10) Select all the ordered pairs in the fourth quadrant.

- a. (6, -4)
- b. (3, -1)
- c. (7, 2)
- d. (1, -4)

# Spiral Review 6

No calculators. Must show work.

1)  $8.4 \div 1.2$

2)  $63.12 - 8.084$

3)  $12 \times 4.5$

4)  $42.01 + 63.99$

5) Select all the inequalities that have the set  $\{-15, -6, \frac{2}{3}, 8\frac{1}{2}\}$  as possible solutions for  $x$ .

- a.  $x > -5$
- b.  $x < 5$
- c.  $x > -16$
- d.  $x < 9$

6) Chevy makes  $m$  muffins every weekday for his bakery and twice as much on weekends. So he makes  $m + m + m + m + m + 2m + 2m$  muffins each week.

- a. Write a simplified expression to show how many muffins he makes each week.
- b. Using the distributive property write an expression to show how many muffins he makes in 5 weeks.

# Spiral Review 6

No calculators. Must show work.

7) Solve for x:

a)  $x + \frac{1}{2} = 20\frac{1}{3}$

b)  $\frac{x}{.5} = 22$

c)  $1.5x = 78$

d)  $x - 7.08 = 15.2$

8) Order the following numbers from LEAST to GREATEST. 0, 7, -2,  $\frac{1}{2}$ , -4.23

9) Amirus reads 8 pages a minute. In how many minutes will he read 60 pages?

**\*YOU MAY USE A CALCULATOR FOR PROBLEM #10!\***

10) The scores and box plot are given for one class' quiz scores:

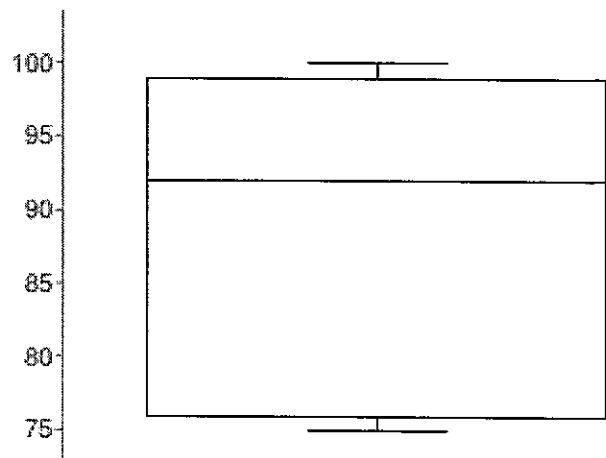
92, 88, 95, 79, 100, 92, 78, 98, 77, 100, 89, 75, 95, 75, 100, 92, 100.5, 100, 75, 30, 75

a) What is the range of data?

a) What is the median score?

a) What is the mean for this class?

b) What is the interquartile range?



# Spiral Review 7

No calculators. Must show work.

For 1-4, solve for y.

1)  $y \div \frac{1}{3} = 15$

2)  $48.91 = y - 7.04$

3)  $70 = 5y$

4)  $y + 4\frac{1}{2} = 6\frac{2}{5}$

5) Select all expressions whose quotient is 3

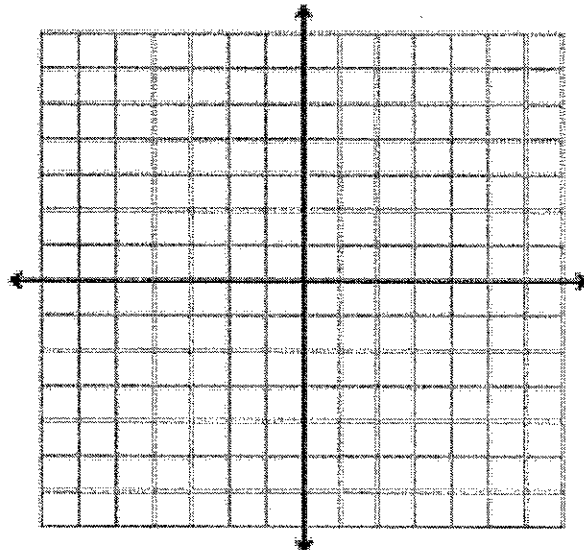
a.  $\frac{1}{2} \div \frac{1}{6}$

b.  $\frac{2}{7} \div 1\frac{1}{3}$

c.  $4\frac{1}{2} \div 1\frac{1}{2}$

d.  $3\frac{2}{3} \div \frac{5}{3}$

6) A rectangle with an area of 40 sq. units is plotted on the coordinate plane with the following vertices: **A**(-2, 4) and **B**(-2, 1). Give the possible coordinates for points C and D to complete the rectangle.



# Spiral Review 7

No calculators. Must show work.

7) Which statement is true?

- a.  $-3 = 3$  because they are both 3 spaces from 0 on a number line.
- b.  $-9 > 2$  because 9 is to the right of 2 on a number line.
- c.  $-2 > -7$  because  $-2$  is to the right of  $-7$  on a number line.

8) To make 12 chocolate chip cookies you need 2 cups of flour.

a. Complete the table.

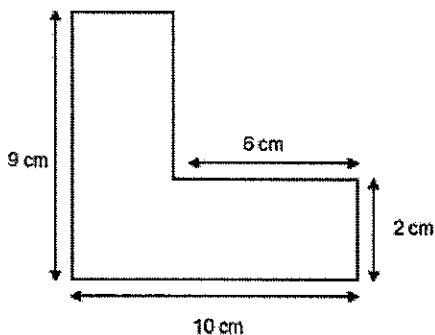
Chocolate Chip Cookies	12	48		360
Cups of Flour	2		9	

b. How many cookies could you bake with 7 cups of flour?

9) Meagan wants to convert kilometers per hour to meters per second. Which conversion would she use? Why?

- a.  $\frac{\text{kilometers}}{\text{hour}} \times \frac{\text{hours}}{\text{second}} \times \frac{\text{feet}}{\text{mile}}$
- b.  $\frac{\text{kilometers}}{\text{hour}} \times \frac{\text{hours}}{\text{seconds}} \times \frac{\text{meters}}{\text{kilometers}}$

10) Find the area of the figure below.



# Spiral Review 8

No calculators. Must show work.

1)  $4\frac{7}{10} \div \frac{1}{3}$

2)  $16 - 78.2$

3)  $5(1.2 + .64)$

4)  $\frac{1}{2}a$  When  $a = 11$

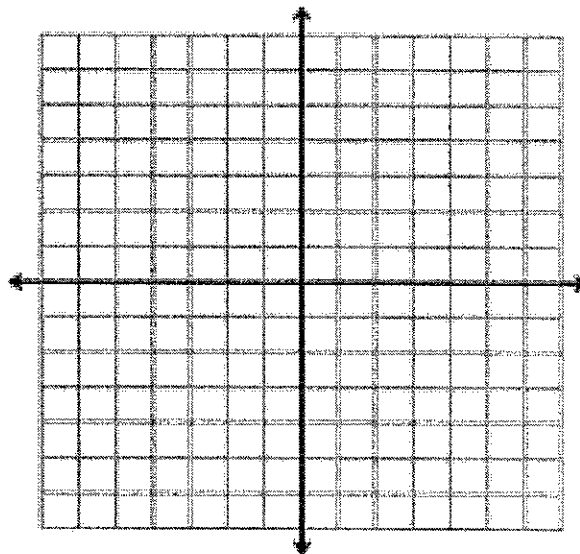
5) Order from least to greatest:

$$-\frac{5}{2}, 3.2, -\frac{9}{3}$$

\_\_\_\_ < \_\_\_\_ < \_\_\_\_

6) **Part 1**

Plot a triangle with the following coordinates on the plane: A(4,-3) B(-2,-3) C(0, 2)



**Part 2**

Find the area of the triangle.

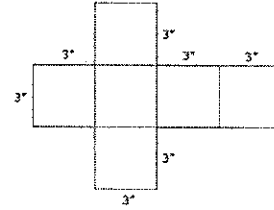
(Area of a triangle =  $\frac{1}{2}bh$ .)

Where  $b$ =base and  $h$ =height of the triangle.)

# Spiral Review 8

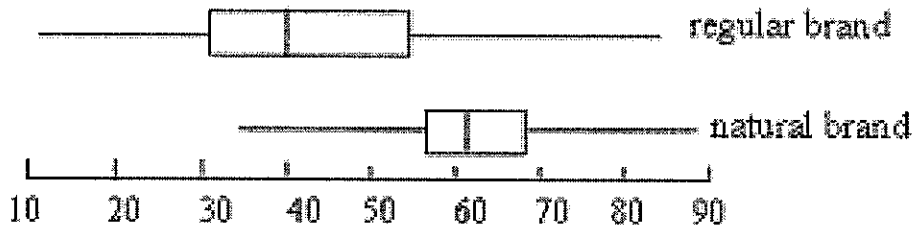
No calculators. Must show work.

7) Part 1 Write the name of the solid the net creates.



Part 2 What is the surface area of the net shown?

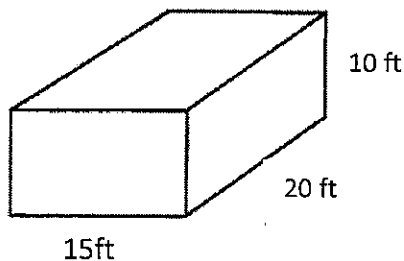
8) Circle which brand has a wider range of data.



9) Write an equation based on the table below.

x	1	2	3	4
y	3	6	9	12

10) A toy company fills the rectangular box shown with smaller boxes to ship. Each smaller box is a cube and each side has a length of  $\frac{1}{2}$  ft. How many small boxes with those dimensions can they ship in the larger box with dimension 15ft x 20ft x 10ft?





# Spiral Review 9

No calculators. Must show work.

Solve for x

1)  $17 = 4x$

2)  $\frac{4}{5}x = 20$

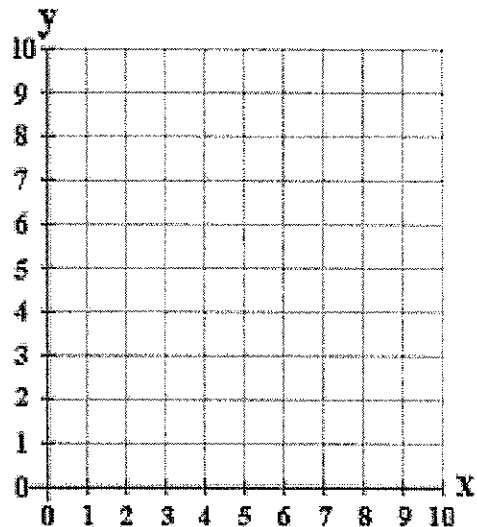
3)  $68.4 = x + 16.72$

4)  $\frac{x}{4.5} = y$  When  $y = 25$

- 5) **Part 1** Landry has read 4 books this year. She plans on reading two more books every month. Write an equation for this scenario.

## Part 2

Graph at least three points for the equation in #2.

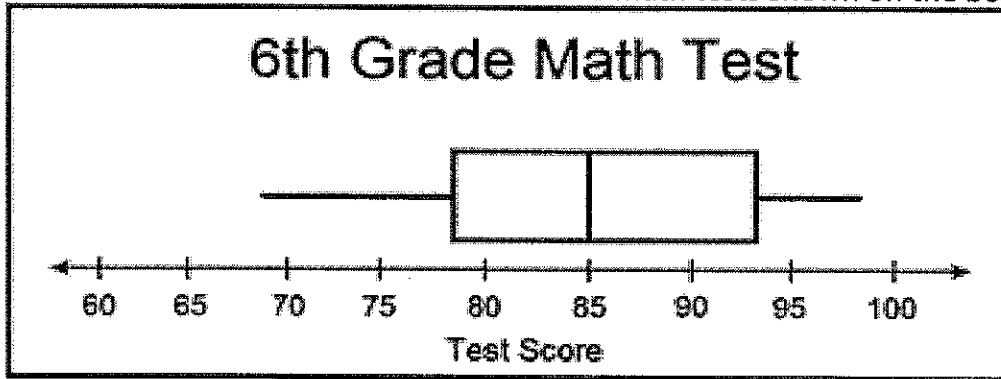


- 6) Kaleb earned \$105 over a period of time. If he earned \$15 dollars each day, how many days did he work to earn \$105? Define the variable. Write an equation that describes the situation. Solve the equation.

# Spiral Review 9

No calculators. Must show work.

- 7) Select all true statements about the 6<sup>th</sup> Grade math tests shown on the box plot.



- a. 50% of the students scored higher than an 85.
- b. The lowest score was a 78.
- c. Nobody scored a 100.
- d. 75% of students scored above 85%.

- 8) Select the correct graph for the inequality:  $x \leq -2$

- a.
- b.
- c.

- 9) Kalea is saving for a new phone. She saved \$210 in one year. What was her savings per month?

- 10) The coldest day on record for Chicago, Illinois was  $-27^{\circ}\text{F}$  on Jan. 20, 1985. What would the opposite temperature be?

# Spiral Review 10

No calculators. Must show work.

Solve for m

1)  $3\frac{2}{3}m = 15$

2)  $\frac{m}{100} = 7.8$

3)  $16.5 = 3 - 532.08$

4)  $44.5 = m + 77.09$

5) Mitzi has piano lessons after school every five days and calls her grandma after school every 8 days. She had to call her grandma and go to piano lessons today. In how many more days will she have to do both activities?

6) The shark swam 20 feet below sea level.

a. What number on the number line would represent sea level best?

b. Write an integer that represents where the shark is on a vertical number line.

c. What is the absolute value of the shark from sea level?

# Spiral Review 10

No calculators. Must show work.

7) **Part 1** Phil wants to spend at most \$60 on shoes. Write an inequality to represent the amount of money,  $y$ , Phil wants to spend.

**Part 2** Graph the solution to the inequality from Part 1 on the number line.



8) Select all expressions equivalent to  $5(3x - 2) + 2x$

a.  $15x + 3 + 2$

b.  $17x - 10$

c.  $7x - 2 + 2x$

d.  $15x - 10 + 2x$

9)

a. Write an expression to show the sum of  $x$  and  $y$ .

b. Write an expression to show  $h$  decreased by 13.

c. Write an expression to show  $k$  less than 3.5.

10) Find the surface area of the pyramid below.

