

Dear students,

Congratulations on completing the 7th grade! Over the summer, you will have to complete the following assignments to reinforce the skills you have learned over the past school year. **You will submit these assignments on Schoology by the due date. A hard copy of these assignments must also be handed in when you return to school in September!**

Have a safe and fun summer!

Assignments	Due Dates
Summer Work: Ratios and Proportions	Friday, July 14
Summer Work: Number System	Friday, August 4
Summer Work: Mixed Review	Friday, August 25

Name _____

Summer Work: Ratios and Proportions due 7/14

For four days, keep track of the amount of time you spend sleeping, watching TV, and outside. Each day, calculate the amount of time you spend on each activity as a fraction, decimal, and percent of your whole day (hint: there are 1440 minutes in a day). Example: Joe sleeps 6 hours (360 minutes) per day or $360/1440 = 1/4$ of the day, as a simplified fraction, and $1/4 = 25/100 = 0.25$, which is 25% of the day. (Show your calculations on the back page.)

		Day 1	Day 2	Day 3	Day 4
Sleeping	Minutes				
	Fraction				
	Decimal				
	Percent				
Watching TV	Minutes				
	Fraction				
	Decimal				
	Percent				
Outside	Minutes				
	Fraction				
	Decimal				
	Percent				

Day 1 Calculations

Day 3 Calculations

Day 2 Calculations

Day 4 Calculations

Name _____

Summer Work: Number System due 8/4

For 5 days, keep track of the temperature. Compare your temperatures to a fictional town in South America. Ex. On day 1, it is $57^{\circ}F$ at Miguel's house. $57 - (-1) = 57 + (+1) = 58^{\circ}$ difference. No calculators allowed. Show your work.

	Day 1	Day 2	Day 3	Day 4	Day 5
Temperature at your house ($^{\circ}F$)					
Temperature in Pueblo Fresco, Chile ($^{\circ}F$)	-1	2	-3.6	1.1	-1.3
Difference between your house and Pueblo Fresco ($^{\circ}F$)					

For the temperature data from your house:

1. Find the mean.

2. Find the median.

3. Find the range.

For the temperature data from Pueblo Fresco:

4. Find the mean.

5. Find the median.

6. Find the range.

Name _____

Summer Work: Mixed Review due 8/25

Question 1

/10

Which fraction equals $-\frac{9}{16}$? Mark all that apply.

- A** $\frac{-3}{4}$ **D** $\frac{3}{4}$
B $\frac{9}{-16}$ **E** $\frac{-9}{16}$
C $\frac{9}{16}$ **F** $\frac{3}{-4}$

Question 2

/10

At 3 PM, the outside temperature was 4°F. The temperature then fell steadily by 2°F every hour for the next four hours. What was the temperature at 7 PM?

- A** 8°F
B 4°F
C -4°F
D -8°F

Question 3

/10

What is the result of adding $-2.9a + 6.8$ and $4.4a - 7.3$?

- A** $7.3a + 14.1$
- B** $2.5a - 1.5$
- C** $1.5a + 0.5$
- D** $1.5a - 0.5$

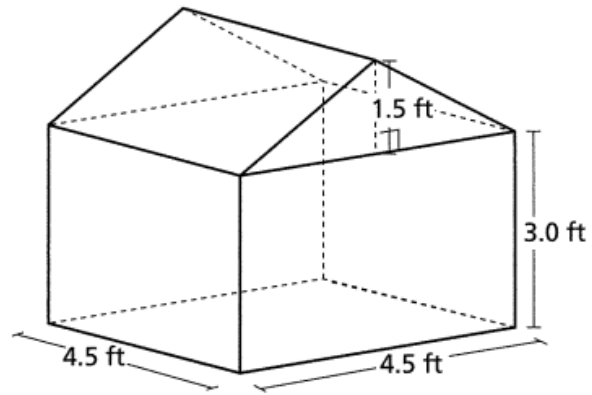
Question 4

/10

Chris used 45 feet of fencing to enclose a circular garden. What is the approximate radius of the garden? Use 3.14 for π .

- A** 51.27 ft
- B** 14.32 ft
- C** 7.16 ft
- D** 3.78 ft

The diagram below shows a doghouse that Calvino built.



What is the volume of the doghouse?

- A 75.9375 ft³
- B 60.75 ft³
- C 30.375 ft³
- D 15.1875 ft³

As part of a group exercise, four students each randomly selected 3 cards with angle measures written on them. The table shows the results.

Name	Angle Measures
Aisha	$100^\circ, 90^\circ, 170^\circ$
Aella	$60^\circ, 25^\circ, 95^\circ$
Andrew	$35^\circ, 35^\circ, 35^\circ$
Ah Lam	$90^\circ, 60^\circ, 45^\circ$

Which student selected angle measures that could form a triangle?

- A** Aella
- B** Aisha
- C** Ah Lam
- D** Andrew

Yesterday, the temperature at noon was 11.4°F . By midnight, the temperature had decreased by 15.7 degrees. What was the temperature at midnight?

- A** -4.3°F
- B** -11.4°F
- C** -15.7°F
- D** -27.1°F

A cereal company puts a colored ring in each box of cereal. There are 6 different ring colors. The colors of the rings in each of 50 cereal boxes are shown in the table below.

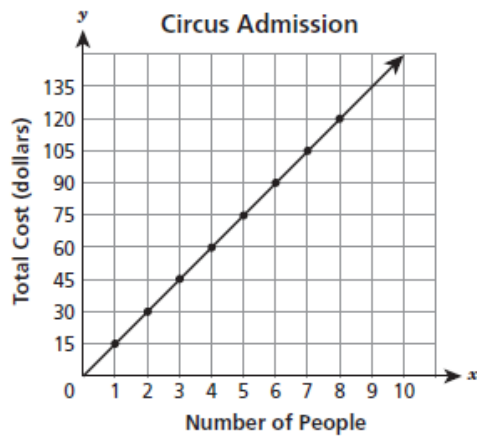
RING COLORS IN CEREAL BOXES

Color	Number of Rings
Red	7
Blue	15
Green	8
Purple	10
Yellow	5
Orange	5

Based on the data, what is the probability that the next cereal box will contain a blue or a yellow ring?

- A $\frac{1}{6}$
- B $\frac{2}{5}$
- C $\frac{3}{5}$
- D $\frac{2}{3}$

The graph below shows the relationship between the number of people in a group and the total cost of admission tickets for a circus.



What point on the graph represents the unit rate?

- A (0, 0)
- B (1, 15)
- C (15, 1)
- D (8, 120)

A recipe requires $\frac{1}{3}$ cup of milk for each $\frac{1}{4}$ cup of water. How many cups of water are needed for each cup of milk?

- A $\frac{1}{12}$
- B $\frac{3}{4}$
- C $\frac{11}{12}$
- D $1\frac{1}{3}$

Question 11

/10

Which expression represents a factorization of $32m + 56mp$?

- A $8(4m + 7p)$
- B $8(4 + 7)mp$
- C $8p(4 + 7m)$
- D $8m(4 + 7p)$

Question 12

/10

Which expression is equivalent to $8c + 6 - 3c - 2$?

- A $5c + 4$
- B $5c + 8$
- C $11c + 4$
- D $11c + 8$

Question 13

/10

Salid bought 35 feet of window trim at a hardware store. The trim cost \$1.75 per foot, including sales tax. If Salid paid with a \$100.00 bill, how much change should he have received?

- A \$20.00
- B \$38.75
- C \$61.25
- D \$80.00

Question 14

/10

Determine whether the following expressions are equivalent to $\frac{8}{7}(21 + 42b)$.

$$8(6b + 3)$$

$$63b$$

$$48b + 24$$

$$(24b + 6b)$$

Question 15

/10

Which equation has the solution, $n = 0.3$?

$$5n - 3 = 1.5$$

$$5n - 1.5 = 3$$

$$3n + 2.5 = 3.4$$

$$3n + 4 = 7.3$$

Question 16

/10

Which equation has the solution, $n = -\frac{2}{3}$?

$$4n + 5 = \frac{7}{3}$$

$$2n + \frac{4}{3} = 1$$

$$4n + \frac{7}{3} = 5$$

$$2n + 1 = \frac{4}{3}$$

Question 17

/10

Which table shows a proportional relationship between x and y ? Mark all that apply.

x	y
25	5
30	6
40	8

A

x	y
25	5
30	10
40	20

C

x	y
25	5
30	4
40	3

B

x	y
25	35
30	40
40	50

D

Question 18

/10

Look at each expression. Is it equivalent to $12x - 6$? Select all that apply.

$-6(-2x + 1)$

$-6x(2x - 1)$

$6x(2 - 1)$

$6(-2x + 1)$

$6(2x - 1)$

$-6(2x - 1)$

Question 19

/10

Which number is located the same distance on a number line from -5 as 3 is?

8

-7

-13

13

Question 20

/10

What value of x makes this equation true?

$$\frac{6x}{-4} = 6 \left(\frac{-1}{2} \right)$$

- 2
- 2
- 3
- 3

Question 21

/10

Mrs. P takes her dog to a veterinarian every year for a check-up. The first year he gained 0.73 pounds. The second year he lost 1.56 pounds. Over the two years, what was his total change in weight?

- 2.19
- 0.93
- 0.83
- 2.29