Sixth Grade Summer Math Homework

- 1) In sewing, the width of a seam is the distance from the edge of the fabric to the stitches. Susannah sews a 5/8 inch seam for clothing and a 1/4 inch seam for quilts. What is the difference between these seam widths, in inches?
 - A) $\frac{1}{2}$
 - B) 3/8
 - C) ½
 - D) 1/8

- 2) A custodian plans to repaint some classroom bookcases. She has $5\frac{1}{4}$ gallons of paint. All of the bookcases are the same size and each requires $\frac{3}{4}$ gallon of pain. How many bookcases will the custodian be able to repaint with that amount of paint?
 - a) 3
 - b) 4
 - c) 7
 - d) 15

- 3) A class of 23 students bought flowers for their teacher for \$44.85. If they divide the cost equally, how much should each student pay?
 - A) \$5.13
 - B) \$2.12
 - C) \$1.95
 - D) \$1.60

4) The table shows the three states with the highest populations in 2004. Which of the following is the best estimate of the difference between the populations of California and Texas?

| State | Population |
|------------|--------------|
| California | 35.9 million |
| Texas | 22.5 million |
| New York | 19.2 million |

- A) 13 million
- B) 17 million
- C) 16 million
- D) 11 million

- 5) A standard bowling lane is 41 ½ inches wide. The width of a bowling lane and one gutter is 50 13/16 inches. What is the width of the gutter?

 A) 8 ½ in.

 B) 8 5/16 in.

 C) 9 5/16 in.

 D) 9 6/7 in
- 6) Carly purchased $9\frac{1}{2}$ pints of ice cream for a party. If each guest will be served exactly $\frac{3}{5}$ pint of ice cream, what is the greatest number of guests that Carly can serve?
 - a) 5
 - b) 9
 - c) 15
 - d) 16

- 7) At a bus station, buses begin their routes at 6:00am. The schedule for two of the buses is based on the time intervals listed below.
 - Bus A has a long route and leaves the station every 75 minutes
 - Bus B has a route and leaves the station every 15 minutes

What is the next time Bus A and Bus B will leave the station at the same time?

- a) 7:00am
- b) 7:15am
- c) 7:30am
- d) 8:30am
- 8) The volume, V, of any cube with the side length, s, can be determined by using the formula $V = s^3$. What is the volume, in cubic centimeters, of a cube with a side length of 2.3 centimeters?
 - a) 5.29
 - b) 6.9
 - c) 8.027
 - d) 12.167

| 8) A charity sold 5,958 tickets for a music concert. The price of each ticket was \$9.91. Which is the best estimate of the total amount of money raised from the ticket sales? |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A \$50,000 |
| B \$54,000 |
| C \$60,000 |
| D \$66,000 |
| 9) Machines S and T were both cleaned this week. |
| • Machine S is cleaned every 12 weeks. |
| • Machine T is cleaned every 8 weeks. |
| What is the fewest number of weeks that will pass before both machines are cleaned again in the same week? |
| A) 16 |

B) 24C) 36D) 48

10) The table below shows the elevations at which different artifacts were found during an archeological dig.

| Artifact | Elevation |
|--------------|---------------------------|
| arrow heard | 15 feet above sea level |
| bone | 721 feet above sea level |
| clay bowl | sea level |
| necklace | 462 feet above sea level |
| woven basket | 1200 feet below sea level |

| a) | write the name of each artifact and the elevation at which each artifact was found using a positive integer, zero, or negative integer. |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|
| | |
| | |
| b) | Explain how you determined If an elevation required a positive integer, zero, or negative integer. |
| | |
| | |

| 11) The product of $\frac{1}{2}$ and another factor is less than $\frac{1}{2}$. Which could be the other factor? |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A) 4/3 B) 4/2 C) 5/2 D) ³ / ₄ |
| 12) Marty lives 2/3 mile from school. Linda lives 3/4 as far from school as Marty does. How far does Linda live from school? A) ½ B) 7/12 C) 5/7 D) 1 mile |
| 13) Ryan is 6 feet 1 inch tall. What is Ryan's height in inches? A) 61 inches B) 67 inches C) 73 inches D) 77 inches |
| 14) Heather lives 7/10 mile from the school and % mile from the library. How much closer does Heather live to the library than to the school? A) 2/10 mile B) 3/10 mile C) 9/15 mile D) 1 mile |

15) Elena bought 6.39 pounds of apples.

What is 6.39 rounded to the nearest whole number?

- A) 6
- B) 6.3
- C) 6.4
- D) 7
- 16) Mary Ann poured 250 milliliters of fruit punch into each of 13 glasses. How many liters of fruit punch did she pour?
 - A) 3.25 liters
 - B) 32.5 liters
 - C) 325 liters
 - D) 3,250 liters
- 17) A rectangle has a length of $\frac{2}{3}$ foot and a width of $\frac{3}{10}$ foot. What is the area of the rectangle?
 - A) 1/5 square foot
 - B) 1/6 square foot
 - C) 11/30 square foot
 - D) 29/30 square foot
- 18) Points P, Q, R, and S are plotted on the number line shown below.



- Which point represents the value of $-1\frac{1}{3}$?
 - a) Point P
 - b) Point Q
 - c) Point R
 - d) Point S

19) Lukas recorded the elevations, in feet, of four activities while on vacation. The table below shows the elevation of each activity, relative to sea level.

ACTIVITY ELEVATION

| Activity | Elevation |
|----------|-----------|
| Biking | 83 ft |
| Diving | -122 ft |
| Hiking | 456 ft |
| Swimming | -17 ft |

Which activity has an elevation closest to sea level?

- a) Biking
- b) Diving
- c) Hiking
- d) Swimming

20) The lowest recorded temperatures for each of two states are listed below.

-27°F and -35°F

Write a statement using <, >, \le , $or \ge$ to compare the recorded temperatures of the two states.