Quarter One Study Guide

1. Which situation results in a ***SUM*** of zero?
   a. A car drove 56.2 miles south and then 56.2 miles east.
   b. A student bought a book for $30.00 and sold it for $25.
   c. A student read 50 pages of a book and then another 50 pages.
   d. A diver descended 26.9 feet in the ocean and then ascended 26.9 feet in the ocean.

2. Evaluate the expression below:

   $26 + (-19) + 9$

   a. -16
   b. -14
   c. 16
   d. 14

3. Which expression is ***EQUAL*** to $r - s$?
   a. –s + - r
   b. –s + r
   c. s + -r
   d. r + s
4. What is the ***DISTANCE*** between an elevation of 432.56 feet above sea level and an elevation of 34.6 feet below sea level?
   a. 397.96
   b. -467.16
   c. -397.96
   d. 467.16
5. The value of one share of stock was $56.20 on Monday. The changes in the value of the stock over the week are listed in the table.

   Changes in the Value of Stock

Day of the week	Changes in stock value ($)
Tuesday	-0.46
Wednesday	1.20
Thursday	-0.34
Friday	-0.55

   What was the value of the stock at the end of the day on ***THURSDAY***?
   a. $54.20
   b. $-56.60
   c. $-1.08
   d. $56.60

6. June started out with $230.60 in her checking account. She ***deposited*** $123.65 and then wrote ***checks*** for $125.00 for rent and $169 for groceries. What was the remaining balance in Sam's checking account at the end of these transactions?
    a. $-60.25
    b. $63.30
    c. $60.25
    d. $-2.23
7. An athlete at a track meet jumped $46\frac{3}{4}$ feet on his first triple jump and $45\frac{7}{8}$ on his second jump. How ***much longer*** was his first jump than his second jump?

    a. $1\frac{1}{8}$
    b. $\frac{1}{8}$
    c. $1\frac{1}{8}$
    d. $\frac{7}{8}$

8. Ms. Thompson's dog, Duchess, cannot go outside if the temperature is below $40°\mathrm{F}$. At 7 PM the temperature was $55°\mathrm{F}$. Over the next 4 hours the temperature ***dropped*** 4.5 degrees, then ***dropped*** another 5.5 degrees, ***rose*** 2 degrees, and ***dropped*** 8.5 degrees. At 11 PM, was Ms. Thompson able to take Duchess outside and what was the temperature at 11 PM?

9. If the temperature is dropping 4 ^{o} ***every hour*** during the night, what number shows the drop in temperature after 8 hours?

    a. -4
    b. -8
    c. -12
    d. -32

10. In a class of 30 students, $\frac{2}{3}$ ***of*** the students walk to school. How many students in the class ***walk*** to school?

    a. 20
    b. 10
    c. 15
    d. 30

11. Which expression is ***not*** equal to $\frac{13}{-10}$?

e. $\frac{-13}{-10}$
f. $-\frac{13}{10}$
g. $\frac{-13}{10}$
h. $-1\frac{3}{10}$

12. A piece of wood that is $37\ \frac{1}{4}$ inches long is cut into 5 ***equal*** pieces. How long is each piece of wood?

a. 186.5 inches
b. $7\frac{9}{20}$
c. $7\frac{1}{2}$
d. $8\frac{9}{20}$

13. Kelsey receives a weekly allowance of $25.80. She receives $\frac{1}{5}$ of her allowance each day. How much allowance does Katie receive in ***one day***?

a. $6.00
b. $6.16
c. $5.16
d. $4.25

14. Which decimal is equivalent to $\frac{1}{12}$?

a. $0.8\overline{3}$
b. 0.83
c. $0.\overline{83}$
d. 1.12

15. A flower measures $3\frac{4}{5}$ inches tall. What is the height of the flower in ***decimal form***?

a. 3.45 inches
b. 3.46 inches
c. 3.08 inches
d. 3.80 inches

16. Calculate: $\frac{2}{5}\left(-\frac{2}{5}\right)\left(\frac{5}{2}\right)$?

a. 0
b. $-\frac{5}{2}$
c. $-\frac{2}{5}$
d. - 2

17. What is the value of $(-3)^4$?

a. -12
b. 12
c. 81
d. -81

18. What is the value of the expression $-5\frac{1}{2}-2\frac{1}{4}+1\frac{5}{8}$?

a. $4\frac{5}{8}$
b. $-6\frac{1}{8}$
c. $-1\frac{7}{8}$
d. $-7\frac{7}{8}$

19. What is the value of the expression below?

$\frac{1}{4} \div \frac{3}{4} - \frac{5}{4} \times \frac{1}{4}$

20. What is the value of -3.23 + 1.15 – 18.53?

a. 5.91
b. -5.91
c. -20.61
d. 20.61