Chapter 10 and Section 11.1 Unit Test - Real Numbers

Name_____**Section**_____

Be sure to show all your work and circle your answer.

Compare using >, <, or =:

1a) -7 _____ 2

1b) $-\dfrac{1}{3}$ _____ -0.33

2a) $-(-3.2)$ _____ $-\left|-\dfrac{16}{5}\right|$

2b) $\left|\dfrac{7}{2}\right|$ _____ $-(-3.5)$

3) Find $-3\dfrac{5}{18}$ increased by $\dfrac{11}{12}$.

4) Find 0.3 subtract -4.56.

5) Find $-3\dfrac{7}{8}$ split into 4 equal parts.

6) Find double -11 .

7) Find -9 divided by -7 minus -4.

8) $\left(-\dfrac{5}{8}\right)\left(\dfrac{4}{7}\right)\left(-\dfrac{21}{9}\right)$

9) $\dfrac{-9\frac{1}{6}}{-8\frac{1}{3}}$

10) $-\sqrt{196} - 8^{1} \bullet (-4) \div 16 + (-7^{2} + 7) - 0 \div 2$

11) $-6.5 + 2.1(-2.35 - 0.15 \div 0.5) - 1.1(0)3$

12) $-\left(\dfrac{1}{6} - \dfrac{2}{3}\right)^{2} \div \dfrac{3}{4} - \dfrac{-3}{8}$

13) Evaluate: $-x - 3xy^{2}z$ if $x = -7$, $y = -2$, and $z = 4$.

14) Evaluate: $\dfrac{ab}{c} - \dfrac{5}{d}$ if $a = -7$, $b = -5$, $c = -12$ and $d = -8$.

15) $-9.32 \div 0$

16) Translate into an expression: The width is the sum of twice the length L and -11.

17) Translate into an expression: The number of blue marbles is three less than a fourth of the number of red marbles (r).

18) On Monday, the high temperature in Anchorage, Alaska was 2° F.
Over the next four days, the high temperature fell by an average of
3° F per day. Finally, on Saturday, it rose by 4°F. What was the high
temperature on Saturday?

19) A group of twenty investors purchased 10,000 shares of Lucent
Technologies at $75.36 per share. Three years later, they sold the
10,000 shares at $5.93 per share. Represent the average net profit
or loss per investor as a signed number.

20) During four rounds of golf, Juanita had scores of – 1, 0, – 4,
and – 3. For the same four rounds of golf, Marcela's average score
was 1 point higher than Juanita's average score. What was
Marcela's average score per round?

Answer Key:

1a) < 1b) < 2a) > 2b) = 3) $-2\frac{13}{36}$ 4) 4.86 5) $-\frac{31}{32}$

6) -22 7) $5\frac{2}{7}$ 8) $\frac{5}{6}$ 9) $1\frac{1}{10}$ 10) -54

11) -12.065 12) $\frac{1}{24}$ 13) 343 14) $-2\frac{7}{24}$ 15) undefined

16) $2L + (-11)$ 17) $\frac{1}{4}r - 3$ 18) $-6°$ F 19) $-$34,715$

20) -1