End of Unit TEST

Adding and Subtracting Rational Numbers

Draw both a model using two-color counters and a model using a number line to represent each number sentence. Then, determine the difference. (3 points each)

#	Problem	Chip Model	Number Line Model
1)	-8 - (-5) =		<
2)	-4 - 9 =		<111111111111111111111111111111111111
3)	2 - (-8) =		<
4)	3 -12 =		<

Determine each difference without using a model (1 point each):

5) 7 – (-13) =	10) 10 – (-1) =
6) -16 - 3 =	11) -9 - 7 =
7) -1 - (-2) =	12) -5 - (-5) =
8) 19 – (-19) =	13) -8 - (-8) =
9) 40 – (-20) =	14) -800 - (-300) =

15) The table gives the lowest temperatures ever recorded in five U.S. cities. Use this table to answer each question:

Honolulu, HI	Huron, SD	Mobile, AL	Norfolk, VA	St. Louis, MO
53	-41	3	-3	-18

- a) What is the difference between the greatest temperature listed and the least temperature listed? Answer: _____
- b) How much greater was Norfolk's lowest temperature than St. Louis's lowest temperature? Answer: _____

Draw both a model using two-color counters and a model using a number line to represent each number sentence. Then, determine the sum. (3 points each)

#	Problem	Chip Model	Number Line Model
16)	-5 + 8 =		<u>-15</u> -10 -5 0 5 10 15
17)	5 + (-8) =		<111111111111111111111111111111111111
18)	-5 + (-8) =		<111111111111111111111111111111111111
19)	5 + 8 =		<111111111111111111111111111111111111

Determine each sum without using a model (1 point each):

20) 45 + (-27) =	25) 32 + (-98) =
21) -153 + 74 =	26) -63 + (-41) =
22) 527 + (-289)	27) -32 + 98 =
23) -47 + (-95) =	28) -51 + 134 =
24) -3 + 4 =	29) -3 + (-4) =

- 30) The average daily temperature in Denton went from -8°F in January to 43°F in March. What was the change in average daily temperature from January to March? (Multiple Choice)
- a. The average temperature rose 51°F.
- b. The average temperature rose 35°F.
- c. The average temperature fell 51°F.
- d. The average temperature fell 35°F.

