MS 181	
Class:	

Name_____ Date:

Mastery Test Add and subtract rational numbers (integers, fractions and decimals)

Directions: Choose the letter of the best answer.

- 1. Identify the expression that is **NOT** equal to the other three.
 - a. 15 I-51 b. I-4I + 6 c. I7 + 3 I d. I-10 I
- 2. Which of the following expressions is represented by the number line below?



3. At 8 A.M., the temperature was 3°F below zero. By 1 P.M., the temperature rose 14°F and by 10 P.M., dropped 12°F. What was the temperature at 10 P.M.?
a. 5°F above zero
b. 5°F below zero
c. 1°F above zero
d. 1°F below zero

- 4. When n is a negative integer, n-n = 0.
 a. True b. False c. Sometimes d. None of the above
- 5. Which sentence about integers is NOT always true?
 a. positive positive = positive
 b. positive + positive = positive
 c. negative + negative = negative
 d. positive negative = positive

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Mastery Test

Add and subtract rational numbers (integers, fractions and decimals) Directions: Answer each question. Show complete work. (2 points each)

- The commutative property is true for addition. For example, 7 + 2 = 2 + 7. Does commutative property apply to subtraction? Justify your answer.
- 7. Use absolute value to express the distance between 10 and -4. Show your work
- 8. The table below shows the temperature changes Monday morning in Bedford, New York over a 4-hour period after a cold front came through. If the beginning temperature was -13°F at 5:00 a.m., what was the temperature at 9:00 a.m.? Show complete work.

Change in Temperature				
5:00 a.m. – 6:00	2°E			
a.m.	-5 F			
6:00 a.m. – 7:00	Эор			
a.m.	-2 F			
7:00 a.m. –	6°E			
8:00 a.m.	-0 F			
8:00 a.m. – 9:00	7°E			
a.m.	/ Г			

9. What value of *a* will make the equation a true statement? Explain how you arrived at your solution.

$$\left(-\frac{3}{4}+\frac{4}{3}\right)+a=0$$

10. Using the Associative Property, 9 + (6 + 3) = (9 + 6) + 3. Is 9 - (6 - 3) equal to (9-

6) – 3? Justify your answer.