Name: _____ Date: _____ Period: _____

***Accentuate the Negative* Unit REVIEW**

Standards

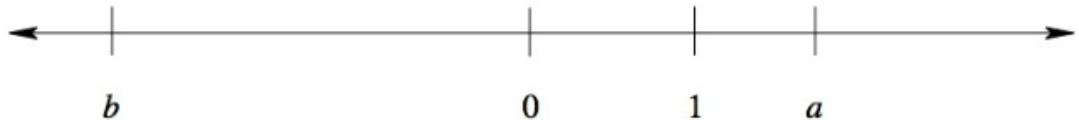
_____ **7.NS.1b/c:** Understand p + q as the number located a distance |q| from p, in the positive or negative direction depending on whether q is positive or negative. Interpret sums of rational numbers by describing real-world contexts. Understand subtraction of rational numbers as adding the additive inverse, p - q = p + (-q). Interpret differences of rational numbers by describing real-world contexts. [1, 2, 3]

_____ **7.NS.1d:** Apply properties of operations as strategies to add and subtract rational numbers. [4-11]p

_____ **7.NS.3**: Solve real-world and mathematical problems involving the four operations with rational numbers. (Order of Operations) [1, 2]

_____ **7.NS.2a/b/c**: Understand the rules for multiplying signed numbers. Interpret products of rational numbers by describing real world contexts. Understand that integers can be divided, and every quotient of integers (with non-zero divisor) is a rational number. Interpret quotients of rational numbers by describing real-world contexts. Apply properties of operations as strategies to multiply and divide rational numbers. [3-10]

1. **A number line is shown below. The numbers 0 and 1 are marked on the line, as are two other numbers, *a* and *b.* Assume the number line is drawn to scale.**



Using the number line above, which of the following numbers is negative? Choose all that apply. Explain your reasoning for your choices.

a. a – 1

b. a – 2

c. – b

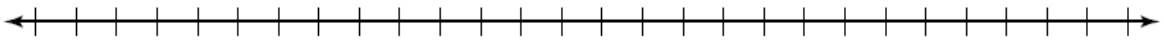
d. a + b

e. a – b

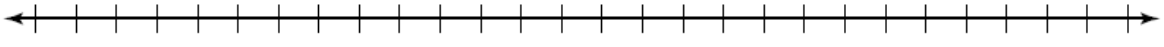
f. ab + 1

Using the number lines below, complete and model each number sentence.

2. – 4 + 10 =



3. -3 – 12 =



Find the answer to each number sentence.

4. $6 - 10 =$
5. $-7 + 15 =$
6. $-1.2 - (-10) =$
7. $21 - (-8) =$
8. $12 + -9 =$
9. $-7 - -9 =$
10. $-7 + -9$
11. $10 + -6 - -1 + 8 =$

Solve.

12. $\frac{1}{4} \cdot -\frac{3}{7} =$
13. $20 \cdot (-6) =$
14. $-\frac{2}{3} \div \frac{2}{5} =$
15. $\frac{-24}{-6} =$
16. $-27 \div -9 \cdot -2 \cdot -1 =$
17. $-12 \cdot (-10) \cdot (-6) =$

18. Malique wants to take four of her friends to a movie. She knows it costs $5.50 for a ticket and $3.25 for popcorn.

a. How much will it cost if she pays for the movie and popcorn for all five people?

b. Write a number sentence to show how you found the total cost.

c. Using your understanding of the distributive property, write a new number sentence that finds the total cost.

Solve.

19. $(5 + -3) \times 4 - 2 + 5^2$

20. $7 \times -2(-5 + -2 \times 3) \div 7$

21. $4 - 4 \times 2 + 2 \times -1 + (4^2 - 10)$

22. $2 \times (3 + -10) - 2^2 + (-3)^2$

23. $5 \times 2 \times 3 + 12 \div 6$

24. $(8 - 20) \div 2^2 - 5 \times -3$

25. $20 - (60 \div (-2 \times 30) - 8) \times 2^2$

26. $4^2 + \frac{-10}{2} + 13$

27. 12 - 18 + 15 + -6 - 1 - 20

28. $23 - (2 - 3 \cdot 4)^2 + 6\frac{1}{4}$

29. (-4)(-2) - 6(2 - 5)

30. $14(2 + 3 - 2 \cdot 2) \div (4^2 - 3^2)$