Math 7/7+ Week 4 Spiral Review **Due: Friday, August 4**

NO CALCULATOR. You must show ALL work to receive credit. You must follow the proper answer sheet format.

1. Which situation does not describe a final value of 0?

A. A balloon rose to a height of 605 ft above the ground. It then dropped 500 ft and then dropped another 105 ft.

B. The temperature at 9 a.m. was –9° F. During the next 3 hours it rose 8° and then rose an additional 2°.

C. After the 1st round in a game Jack's score was –11. He then scored 5 points in the 2nd round and an additional 6 points in the 3rd round.

D. Keisha's bank account had $450 at the beginning of the week. She deposited $200 on Monday, withdrew $500 on Tuesday and withdrew an additional $150 on Wednesday.

2. Which equation is true?

A. $\frac{10}{21}+\left(-\frac{21}{10}\right)=-1$

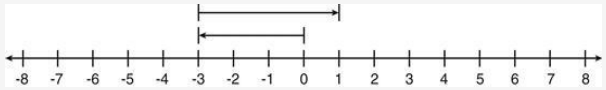
B. $\frac{10}{21}+\left(-\frac{10}{21}\right)=0$

C. $47+(-47)=-94$

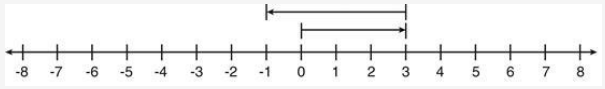
D. $47+(-47)=94$

3. Which number line below correctly represents the expression $-3+4$?

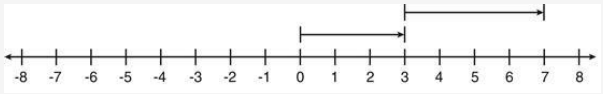
A.



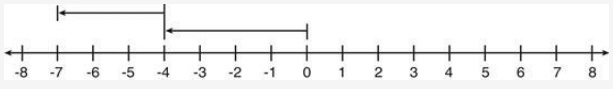
B.



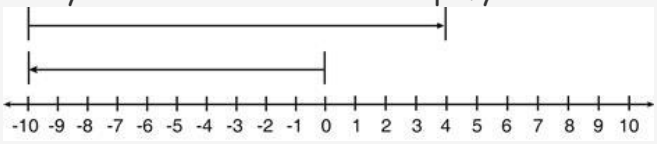
C.



D.



4. Barry used a number line to simplify a numerical expression on a math test.



Which number did Barry add to get a result of 4 on the numerical expression he simplified?

A. –14 **B.** –6 **C.** 4 **D.** 14

5. What is the distance from –12 to –5 on a number line?

A. –17 **B.** –7 **C.** 7 **D.** 17

6. What is the value of the expression $(^{-}30) - (^{-}11) + (^{-}5)$?

7. What is the value of $-2\frac{1}{3}+4\frac{1}{3}$?

8. Which expression is equivalent to the expression $-\frac{2}{3}\left(3-\frac{1}{2}\right)(-1)$?

A. $2-\frac{1}{3}$ B. $2+\frac{1}{3}$ C. $-2+\frac{1}{3}-1$ D. $-2+\frac{1}{3}+\frac{2}{3}$

9. A pattern starts with the term $-\frac{1}{2}$. Each term after the first is multiplied by $-\frac{1}{2}$ to get the next term. Which pattern fits this description?

A. $-\frac{1}{2}, -\frac{1}{4}, -\frac{1}{8}, -\frac{1}{16}, -\frac{1}{32}, -\frac{1}{64}\ldots$

B. $-\frac{1}{2}, +\frac{1}{4}, -\frac{1}{8}, +\frac{1}{16}, -\frac{1}{32}, +\frac{1}{64}\ldots$

C. $-\frac{1}{2}, -1, -1\frac{1}{2}, -2, -2\frac{1}{2}, -3\ldots$

D. $-\frac{1}{2}, +\frac{1}{4}, +\frac{1}{8}, -\frac{1}{16}, +\frac{1}{32}, +\frac{1}{64}\ldots$

10. The variables x and y represent nonzero rational numbers. Which situation could be solved using the product of xy, where xy represents a negative value?

A. the change in degrees if the temperature decreases by x degrees per day for y days

B. the amount of juice Susan drinks in x days if she drinks y fluid ounces of juice each day

C. the depth of a scuba diver if he dives x feet below sea level and then rises y feet

D. the change in the price of an item if the price is increased by x dollars one month and decreased by y dollars the next month

11. What is the value of the expression $\left(-\frac{3}{5}\right)\div\left(\frac{3}{-5}\right)$?

12. What is the value of $-\frac{2}{5}\cdot\frac{10}{14}$?

13. What is the value of $6\frac{3}{5}\div -1\frac{1}{2}$?

14. Which sentence explains the result of multiplying 20 and -5?

A. The product is positive and less than 20.

B. The product is negative and less than -5.

C. The product is positive and greater than 20.

D. The product is negative and greater than -5.

15. Jacob measured the temperatures of two liquids. The first liquid was $-8°C$. The second liquid was $14°C$. What is the difference in the temperatures of these two liquids?