Equivalent Expressions Practice #1   Name _____

Evaluate the following using Mental Math and then check with the calculator.

1. $(-3)^2 + (-4)(-9) =$ _____

2. $|-4.3 - (-7.2)| =$ _____

3. $\dfrac{2}{5} - \dfrac{1}{15} =$ _____

4. $\dfrac{(-3)^3}{-9} =$ _____

5. $12 \div (-4) - 5 \div (-10) =$ _____

6. $\dfrac{2}{3} \cdot \dfrac{5}{9} =$ _____

Use the Distributive Property to Expand the following.

7. $-6(-3x - 2)$

8. $\dfrac{2}{3}(6x - 9y)$

9. $-(-2x - y + 10z)$

Match the following property with its example.

_____ 10. Additive Identity

_____ 11. Additive Inverse

_____ 12. Multiplicative Identity

_____ 13. Multiplicative Inverse

A. $-7 \cdot 1 = -7$

B. $4 + 0 = 4$

C. $\dfrac{3}{4} \cdot \dfrac{4}{3} = 1$

D. $\dfrac{1}{3} + \left(-\dfrac{1}{3}\right) = 0$

Solve the following Word Problem.

14. When Jeremy woke up in the morning the temperature was 65° F. Throughout the day the temperature rose 8° F, then fell 1° F, the rose 5° F, and finally fell 10° F. What was the final temperature at the end of the day?

Equivalent Expressions Practice #1   Name _____ **Key** _____

Evaluate the following using Mental Math and then check with the calculator.

1. $(-3)^2 + (-4)(-9) =$ __45__

   9 + 36
   45

2. $|-4.3 - (-7.2)| =$ __2.9__

   $|2.9|$

3. $\frac{2}{5} - \frac{1}{15} =$ __$\frac{1}{3}$__

   $\frac{6}{15} - \frac{1}{15} = \frac{5}{15} \div 5 \quad \frac{1}{3}$

4. $\frac{(-3)^3}{-9} =$ __3__

   $\frac{-27}{-9}$

5. $12 \div (-4) - 5 \div (-10) =$ __$3\frac{1}{2}$__

   $3 - (-\frac{1}{2})$
   $3 + \frac{1}{2}$
   $3\frac{1}{2}$

6. $\frac{2}{3} \cdot \frac{5}{9} =$ __$\frac{10}{27}$__

   $\frac{2\cancel{6}}{9} \cdot \frac{5}{\cancel{9}_3} = \frac{10}{27}$

Use the Distributive Property to Expand the following.

7. $-6(-3x - 2)$

   $18x + 12$

8. $\frac{2}{3}(6x - 9y)$

   $4x - 6y$

9. $-1(-2x - y + 10z)$

   $2x + y - 10z$

Match the following property with its example.

___B___ 10. Additive Identity

___D___ 11. Additive Inverse

___A___ 12. Multiplicative Identity

___C___ 13. Multiplicative Inverse

A. $-7 \cdot 1 = -7$

B. $4 + 0 = 4$

C. $\frac{3}{4} \cdot \frac{4}{3} = 1$

D. $\frac{1}{3} + \left(-\frac{1}{3}\right) = 0$

Solve the following Word Problem.

14. When Jeremy woke up in the morning the temperature was 65° F. Throughout the day the temperature rose 8° F, then fell 1° F, the rose 5° F, and finally fell 10° F. What was the final temperature at the end of the day?

$65 + 8 - 1 + 5 - 10$
$73 - 1 + 5 - 10$
$72 + 5 - 10$
$77 - 10 \rightarrow \boxed{67°\ \text{at the end of day}}$