NAME _____

1.

The number $43\frac{1}{3}$ can be classified as which type of number?

A. Integer   B. Irrational number

C. Real number   D. Whole number

2. Solve the equation for x:

$$\frac{2}{3}(x + 2) = \frac{4}{3}$$

3. Simplify by using the distributive property and combining like terms:

$-(4x + 9) - 3$	$5 - 4(x - 6) + x$
$7(x + 11) + 9(x + 5)$	$\frac{1}{2}(2x + 4y)$

4. Simplify using order of operations:
If $x = -2, y = -3$

$$\frac{x^2 + 6x - 7}{y^3 + 22}$$

5. Solve the equation:

$$12 + 5v = 2v - 9$$

A. -1

B. -7

C. 1

D. 7

6. Which of the following equations is a correct example of the distributive property?

A. $(4 + x^2) + z = 4 + (x^2 + z)$

B. $(7y^2) \cdot 1 = 7y^2$

C. $6p^3 + 9 = 3(2p^3 + 9)$

D. $3(2a + 1) = 6a + 3$

E. $9y^5 + 0 = 9y^5$

7. Simplify the radical expression:

$$\sqrt[3]{2720}$$

8. Simplify the radical expression:

$$\sqrt{686}$$

9. Simplify the radical expression:

$$\sqrt{512t^4s^3}$$

10. Simplify the radical expression:

$$\sqrt[3]{135m^7n}$$