

**Quiz #2****ALGEBRA II Version A**

1. What is the value of  $9 - [12 + (15 \div 3)]$ ?
2. Find the value of  $\frac{7(-6 - 2)}{4}$ .
3. Evaluate  $x - (2xy + y) \cdot y$  if  $x = -3$  and  $y = 2$ .
4. What is the perimeter of a rectangle with length  $(3x + 2)$  and width  $(x - 1)$ ?
5. Evaluate  $\frac{2a^2 + 5b}{b - 3ac^2}$  if  $a = 2$ ,  $b = 4$  and  $c = -1$ .
6. Find the additive inverse and multiplicative inverse of  $1\frac{5}{8}$ .

Name the property of real numbers illustrated by each equation.

7.  $5(-2 - 7) = 5(-2) - 5(-7)$ .
8.  $(3c \cdot 6)2 = 3c(6 \cdot 2)$ .
9.  $-\sqrt{5} + 0 = -\sqrt{5}$
10.  $\frac{4}{7} \cdot \frac{7}{4} = 1$
11. Simplify the expression  $8(a + 2b) - 7b + 6(3a - b)$ .
12. To which set of numbers does each number belong? Letter only. Give all the names that apply.

Natural (N) Whole (W)	Integer (Z) Rational (Q)	Irrational (I) Real (R)
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|---------------|---------------------|
| a. 4          | d. $0.\overline{6}$ |
| b. 0          | e. $\pi$            |
| c. $\sqrt{6}$ | f. $\sqrt{0.25}$    |

13. **True or False.** If false, give an example that proves the statement wrong.

- a. Every natural number is an integer.
- b. Some irrational numbers are natural numbers.
- c. All integers are whole numbers.
- d. All real numbers are either rational or irrational.