

Classify Numbers and Basic Algebra Homework

SOLVE AND SHOW ALL WORK ON SEPARATE PAPER. THIS PAGE WILL NOT BE GRADED!

Classify each number.

1. $\sqrt{31}$

2. -17

Find the opposite and the reciprocal of the number.

3. 500

4. $-\frac{3}{4}$

Evaluate the expression for the given value of the variable(s).

5. $5a + 5b$; $a = -6$, $b = -5$

6. $\frac{4(3h - 6)}{1 + h}$; $h = -2$

7. The expression $-16t^2 + 1800$ models the height of an object t seconds after it has been dropped from a height of 1800 feet. Find the height of an object after falling for 4.8 seconds.

Simplify the expression

8. $4c - 4d + 8c - 3d$

10. $8 \div 4(3 + 1)^2$

9. $-3(-4y + 3) + 7y$

11. $5 - 2[3(1 - 2)^2] + 2$

Solve the equation.

12. $3y + 20 = 3 + 2y$

13. $-5y - 9 = -(y - 1)$

Solve the equation or formula for the indicated variable.

14. $S = 5r^2t$, for t

15. $T = \frac{2U}{E}$, for U