

Unit 1 Test Review**Intro to Alg 2****Learning Target****1.1** I can identify the properties of real numbers.

Name the property of real numbers illustrated by each equation.

1. $(2 + x) + 3 = 2 + (x + 3)$

2. $8 + 0 = 8$

3. $16(3t + 4v) = 48t + 64v$

4. $\sqrt{2} \cdot 3 = 3 \cdot \sqrt{2}$

Lists the sets of numbers to which each number belongs.

5. -17

6. $\sqrt{52}$

7. 5

8. -3.25

9. 0

Learning Target**1.2** I can use properties of real numbers and the correct order of operations to simplify expressions and functions.

Simplify each expression.

10. $\frac{3(a - b)}{9} + \frac{4}{9}b$

11. $t + \frac{t^2}{2} + t^2 + t$

12. $2(m - n^2) - 6(n^2 + 3m)$

13. $x(x - y) + y(y - x)$

Learning Target**1.3** I can solve single-step and multi-step equations in one variable.

Solve each equation.

14. $7y + 5 = 6y + 11$

15. $\frac{1}{4}x + 3 = \frac{1}{3}x - 4$

16. $t - 3\left(t + \frac{4}{3}\right) = 2t + 3$

17. $0.5(c + 2.8) - c = 0.6c + 0.3$

Solve the equation for the indicated variable. State any restrictions on the variable.

18. $\frac{1}{3}(x + 5) = k$, for x

19. $A = \frac{1}{2}(b_1 + b_2)h$, for b_2

20. $A = \frac{1}{2}(b_1 + b_2)h$, for h

21. $P = 2(l + w)$, for w

22. $\frac{4}{3}x - \frac{5}{6}y = 2$, for y

