

## Equation Development 4.2

Solve, check, and graph the following equations.

1)  $v - \sqrt{3} = 5 + 4\sqrt{3}$

2)  $\frac{a}{\sqrt{10}} = 3 + \sqrt{2}$

3)  $\frac{a\sqrt{2}}{7} = 3$

4)  $2\sqrt{d} - 11 = -5$

5)  $\sqrt{a-5} = 4$

6)  $\sqrt{v+7} + 15 = 12$

7)  $-5\sqrt{2q} = 30$

8)  $8\sqrt{5y} + 5 = 85$

9)  $\sqrt{3c+7} = 5$

Solve and graph the following inequalities.

11)  $11 \leq 4x - 1 < 27$

12)  $7x + 4 < 39$  or  $5x - 3 > 42$

13)  $-18 > 9x > 63$

14)  $|4t+2| < 18$

15)  $|3x| > 21$

16)  $|6t+3| \leq 27$

17)  $|w+5| \geq 7$