

BLM 5–6 Section 5.3 Extra Practice

1. **a)** $x \geq -3, x = 46$ **b)** $x \geq 0, x = \frac{16}{5}$

c) $x \leq \frac{5}{3}, x = \frac{5}{3}$ **d)** $x \leq 0, x = -288$

2. **a)** $x = 28, x \geq 0$ **b)** $y = 0, y \in \mathbb{R}$

c) $y = 8, y \geq -1$ **d)** $x = 17, x \geq -\frac{15}{2}$

3. **a)** $m = 1, m \leq \frac{4}{3}$ **b)** $x = -1, 5; x = -1, x \geq 1$

c) $n = \frac{9 + \sqrt{17}}{2}, n \geq 0$ **d)** $x = -2 + \sqrt{5}, x \in \mathbb{R}$

4. **a)** $x = 8, x \geq \frac{3}{2}$ **b)** $y = -1, y = 5; y = -1, y \geq 1$

c) no solution **d)** $p = 3, p \geq \sqrt{\frac{3}{2}}$

5. **a)** $w = \frac{9}{4}, w \geq 0$ **b)** $x = 0, x = 16; x \geq 0$

c) $y = 4, y \geq 0$ **d)** $x = 6, x \geq 5$