## 3.3 Practice A

1. 
$$x = 5$$
 and  $x = -1$ 

**1.** 
$$x = 5$$
 and  $x = -1$  **2.**  $y = 13$  and  $y = -1$ 

3. 
$$n = 10 + 2\sqrt{10}$$
 and  $n = 10 - 2\sqrt{10}$ 

**4.** 
$$p = -7 + \sqrt{2}$$
 and  $p = -7 - \sqrt{2}$ 

**5.** 
$$c = 16; (x + 4)^2$$
 **6.**  $c = 49; (x + 7)^2$ 

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7. 
$$c = 81; (y - 9)^2$$

**8.** 
$$c = 169; (y + 13)^2$$

**9.** 
$$x = -4 + \sqrt{11}$$
 and  $x = 4 - \sqrt{11}$ 

**10.** 
$$h = 5 + \sqrt{29}$$
 and  $h = 5 - \sqrt{29}$ 

**11.** 
$$t = 6 + \sqrt{26}$$
 and  $t = 6 - \sqrt{26}$ 

**12.** 
$$s = -7 + \sqrt{58}$$
 and  $s = -7 - \sqrt{58}$ 

**13.** 
$$y = -3 + \sqrt{11}$$
 and  $y = -3 - \sqrt{11}$ 

**14.** 
$$g = -5 + \sqrt{19}$$
 and  $g = -5 - \sqrt{19}$ 

**15.** square roots; Both sides are perfect squares; x = 8and x = -2

**16.** factoring; factorable; 
$$x = -4$$
 and  $x = -1$ 

17. Sample answer: factoring and square roots; factorable, both sides are perfect squares; x = 3

**18.** completing the square; even middle term; 
$$x = 5 + \sqrt{33}$$
 and  $x = 5 - \sqrt{33}$ 

**19.** 4 **20.** 
$$-2 + 2\sqrt{6}$$