## 11.4 Extension: Completing the square

1. Expand each binomial-squared expression to the form  $ax^2 + bx + c$ .

(a) 
$$(x+3)(x+3)$$

(c) 
$$(x+5)^2$$

(b) 
$$(x+2)^2$$

(d) 
$$(x+7)^2$$

2. Simplify each radical.

(a) 
$$\sqrt{50}$$

(c) 
$$\sqrt{27}$$

(b) 
$$\sqrt{18}$$

(d) 
$$\sqrt{24}$$

3. Solve for the appropriate variable (h and r).

(a) 
$$Area = \frac{1}{2}(14.8)h = 62.9$$

(b) 
$$Area = \pi r^2 = 483$$