

# Chapter Test A

For use after Chapter 9

Evaluate the expression.

1.  $\sqrt{81}$
2.  $-\sqrt{100}$
3.  $\sqrt{b^2 - 4ac}$  when  $a = 3, b = 7, c = 2$
4.  $\sqrt{b^2 - 4ac}$  when  $a = 3, b = 8, c = 4$

Solve the equation by finding square roots.

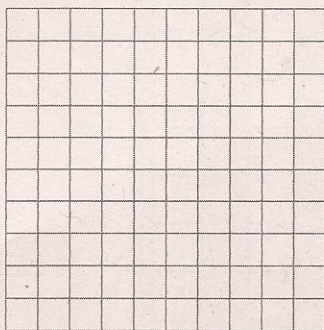
5.  $x^2 = 81$
6.  $x^2 = 49$

Simplify the expression.

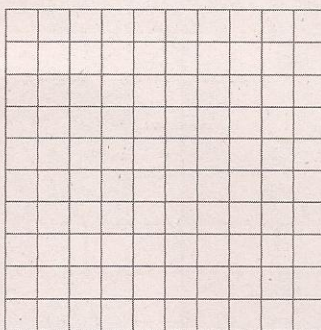
7.  $\sqrt{45}$
8.  $\sqrt{54}$
9.  $\sqrt{\frac{16}{25}}$
10.  $\sqrt{\frac{10}{32}}$

Sketch the graph of the function. Label the vertex.

11.  $y = 3x^2$



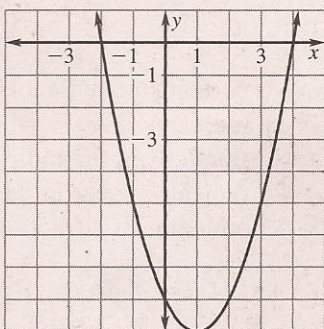
12.  $y = -x^2$



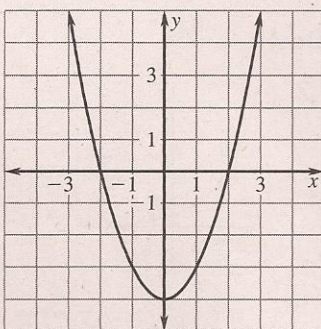
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. Use grid at left.
12. Use grid at left.
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_

Use the graph to estimate the roots of the equation.

13.  $y = x^2 - 2x - 8$



14.  $y = x^2 - 4$



Use the quadratic formula to solve the equation.

15.  $0 = x^2 + x - 20$

16.  $0 = x^2 - 5x + 6$