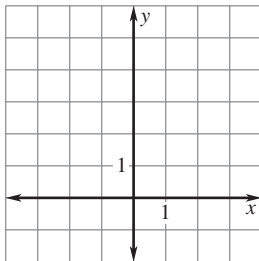


Chapter Test A

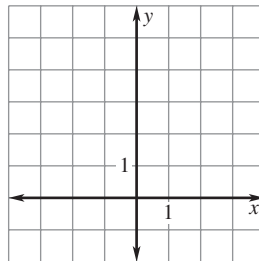
For use after Chapter 5

Graph the quadratic function.

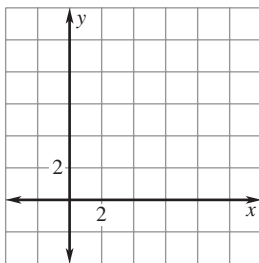
1. $y = x^2$



2. $y = x^2 - 1$



3. $y = x^2 - 10x + 25$

**Solve the quadratic equation by factoring.**

4. $x^2 - 4x = 0$

5. $x^2 - 49 = 0$

6. $3x^2 - 21x + 36 = 0$

Solve the quadratic equation using any appropriate method.

7. $x^2 = 144$

8. $x^2 - 8 = 0$

9. $4(x + 1)^2 = 64$

Simplify the expression.

10. $3 + \sqrt{-4}$

11. $(7 + 8i) - (3 + 6i)$

12. $5 \div (7i)$

Solve the equation.

13. $x^2 = -9$

14. $2y^2 + 6 = y^2$

Find the absolute value of the complex number.

15. $2 + i$

16. $3i - 2$

Solve the equation by completing the square.

17. $x^2 - 4x + 3 = 0$

18. $x^2 + 4x - 3 = 0$

Use the quadratic formula to solve the equation.

19. $x^2 + 10x + 9 = 0$

20. $x^2 + 3x - 5 = 0$

Answers

1. Use grid at left.

2. Use grid at left.

3. Use grid at left.

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

Chapter Test A

For use after Chapter 5

Find the discriminant of the equation and give the number and type of solutions of the equation.

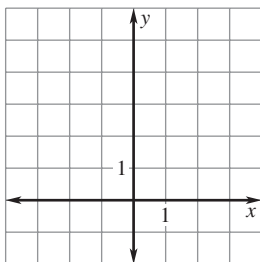
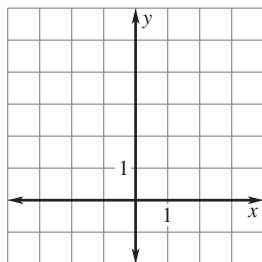
21. $x^2 + 6x - 16 = 0$

22. $2x^2 + 5x - 7 = 0$

Graph the quadratic inequality.

23. $y > x^2$

24. $y \leq 2x^2 - 1$



25. **Ball Toss** You toss a ball into the air at a height of 5 feet. The velocity of the ball is 30 feet per second. You catch the ball 6 feet from the ground. Use the model

$$6 = -16t^2 + 30t + 5$$

to find how long the ball was in the air.

21. _____

22. _____

23. Use grid at left. _____

24. Use grid at left. _____

25. _____