Conic Sections: Circles, Ellipses & Hyperbolas · 1

Find the center of the circle $(x + 1)^2 + (y + 8)^2 = 49$.

Conic Sections: Circles, Ellipses & Hyperbolas · 2

Find the vertex with the larger y-coordinate of the ellipse $(x - 5)^2 / 16 + (y - 3)^2 / 25 = 1$.

Conic Sections: Circles, Ellipses & Hyperbolas · 3

Find the center of the hyperbola $(x + 1)^2 / 9 - (y + 4)^2 / 16 = 1$.

Conic Sections: Circles, Ellipses & Hyperbolas · 4

Complete the square to find the center of the circle $x^2 + 4x + y^2 - 5 = 0$.

Conic Sections: Circles, Ellipses & Hyperbolas · 5

Find the center of the circle $(x + 4)^2 + (y - 6)^2 = 25$.

Conic Sections: Circles, Ellipses & Hyperbolas · 6

Find c, the distance from the center to each focus of the ellipse $x^2 / 16 + (y - 2)^2 / 25 = 1$.

Conic Sections: Circles, Ellipses & Hyperbolas · 7

Complete the square to find the center of the circle $x^2 + 4x + y^2 - 8y + 4 = 0$.

Conic Sections: Circles, Ellipses & Hyperbolas · 8

Find the positive slope of the asymptotes of the hyperbola $(y - 1)^2 / 36 - (x + 6)^2 / 64 = 1$.

Conic Sections: Circles, Ellipses & Hyperbolas · 2

ANSWER

(5, 8)

Conic Sections: Circles, Ellipses & Hyperbolas · 1

ANSWER

(-1, -8)

Conic Sections: Circles, Ellipses & Hyperbolas · 4

ANSWER

(-2, 0)

Conic Sections: Circles, Ellipses & Hyperbolas · 3

ANSWER

(-1, -4)

Conic Sections: Circles, Ellipses & Hyperbolas · 6

ANSWER

3

Conic Sections: Circles, Ellipses & Hyperbolas · 5

ANSWER

(-4, 6)

Conic Sections: Circles, Ellipses & Hyperbolas · 8

ANSWER

$$\frac{3}{4}$$

Conic Sections: Circles, Ellipses & Hyperbolas · 7

ANSWER

(-2, 4)

Complete the square to find the center of the circle $x^2 - 14x + y^2 - 10y + 10 = 0$.

Find c, the distance from the center to each focus of the ellipse $(x + 2)^2 / 169 + (y + 5)^2 / 144 = 1$.

Find the focus with the larger x-coordinate of the hyperbola $(x - 2)^2 / 144 - (y - 4)^2 / 25 = 1$.

Find the length of the major axis of the ellipse $(x + 4)^2 / 225 + (y + 2)^2 / 289 = 1$.

Find the vertex with the larger y-coordinate of the hyperbola $(y - 1)^2 / 64 - x^2 / 225 = 1$.

Find the positive slope of the asymptotes of the hyperbola $(y + 4)^2 / 36 - (x - 1)^2 / 64 = 1$.

Find c, the distance from the center to each focus of the hyperbola $(y - 2)^2 / 225 - (x - 3)^2 / 64 = 1$.

Find the vertex with the larger x-coordinate of the ellipse $(x + 5)^2 / 169 + (y + 4)^2 / 25 = 1$.

Conic Sections: Circles, Ellipses & Hyperbolas · 10

ANSWER

5

Conic Sections: Circles, Ellipses & Hyperbolas · 9

ANSWER

(7, 5)

Conic Sections: Circles, Ellipses & Hyperbolas · 12

ANSWER

34

Conic Sections: Circles, Ellipses & Hyperbolas · 11

ANSWER

(15, 4)

Conic Sections: Circles, Ellipses & Hyperbolas · 14

ANSWER

$$\frac{3}{4}$$

Conic Sections: Circles, Ellipses & Hyperbolas · 13

ANSWER

(0, 9)

Conic Sections: Circles, Ellipses & Hyperbolas · 16

ANSWER

(8, -4)

Conic Sections: Circles, Ellipses & Hyperbolas · 15

ANSWER

17

Complete the square to find the radius of the circle $x^2 + y^2 - 10y - 11 = 0$.

Find c, the distance from the center to each focus of the ellipse $(x - 3)^2 / 100 + (y + 4)^2 / 36 = 1$.

Find c, the distance from the center to each focus of the hyperbola $(x - 5)^2 / 36 - y^2 / 64 = 1$.

Find the length of the major axis of the ellipse $(x - 2)^2 / 64 + (y - 2)^2 / 100 = 1$.

Find the vertex with the larger y-coordinate of the hyperbola $(y + 1)^2 / 225 - (x + 6)^2 / 64 = 1$.

Find the center of the hyperbola $(x - 1)^2 / 25 - (y - 5)^2 / 144 = 1$.

Find c, the distance from the center to each focus of the ellipse $(x - 4)^2 / 64 + (y + 2)^2 / 100 = 1$.

Find the vertex with the larger x-coordinate of the ellipse $x^2 / 25 + y^2 / 16 = 1$.

Conic Sections: Circles, Ellipses & Hyperbolas · 18

ANSWER

8

Conic Sections: Circles, Ellipses & Hyperbolas · 17

ANSWER

6

Conic Sections: Circles, Ellipses & Hyperbolas · 20

ANSWER

20

Conic Sections: Circles, Ellipses & Hyperbolas · 19

ANSWER

10

Conic Sections: Circles, Ellipses & Hyperbolas · 22

ANSWER

(1, 5)

Conic Sections: Circles, Ellipses & Hyperbolas · 21

ANSWER

(-6, 14)

Conic Sections: Circles, Ellipses & Hyperbolas · 24

ANSWER

(5, 0)

Conic Sections: Circles, Ellipses & Hyperbolas · 23

ANSWER

6