Task card 1 Conic Sections: Circles, Ellipses...

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

Task card 2 Conic Sections: Circles, Ellipses...

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

Task card 3 Conic Sections: Circles, Ellipses...

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

Task card 4 Conic Sections: Circles, Ellipses...

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

Task card 5 Conic Sections: Circles, Ellipses...

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

Task card 6 Conic Sections: Circles, Ellipses...

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

Task card 7 Conic Sections: Circles, Ellipses...

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

Task card 8 Conic Sections: Circles, Ellipses...

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

Task card 9 Conic Sections: Circles, Ellipses...

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

Task card 10 Conic Sections: Circles, Ellipses...

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

Task card 11 Conic Sections: Circles, Ellipses...

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

Task card 12 Conic Sections: Circles, Ellipses...

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

Task card 13 Conic Sections: Circles, Ellipses...

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

Task card 14 Conic Sections: Circles, Ellipses...

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

Task card 15 Conic Sections: Circles, Ellipses...

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

Task card 16 Conic Sections: Circles, Ellipses...

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

Task card 17 Conic Sections: Circles, Ellipses...

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

Task card 18 Conic Sections: Circles, Ellipses...

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

Task card 19 Conic Sections: Circles, Ellipses...

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

Task card 20 Conic Sections: Circles, Ellipses...

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

Task card 21 Conic Sections: Circles, Ellipses...

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

Task card 22 Conic Sections: Circles, Ellipses...

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

Task card 23 Conic Sections: Circles, Ellipses...

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

Task card 24 Conic Sections: Circles, Ellipses...

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

Conic Sections: Circles, Ellipses & Hyperbolas Task Cards

Recording sheet · Grade 12 · Answer each question. Write points as (x, y).

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Conic Sections: Circles, Ellipses & Hyperbolas Task Cards: Answer Key

Grade 12 · Medium

The answers online

1. (-1, -8)	**2.** (5, 8)	**3.** (-1, -4)
4. (-2, 0)	**5.** (-4, 6)	**6.** 3
7. (-2, 4)	**8.** $\frac{3}{4}$	**9.** (7, 5)
10. 5	**11.** (15, 4)	**12.** 34
13. (0, 9)	**14.** $\frac{3}{4}$	**15.** 17
16. (8, -4)	**17.** 6	**18.** 8
19. 10	**20.** 20	**21.** (-6, 14)
22. (1, 5)	**23.** 6	**24.** (5, 0)