Task card 1 Equations of Circles

Find the center of the circle $x^2 + y^2 + 4x - 5 = 0$.

Task card 2 Equations of Circles

Find the radius of the circle $x^2 + y^2 - 2x - 6y + 1 = 0$.

Task card 3 Equations of Circles

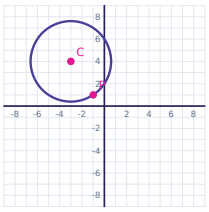
Find the radius of the circle $(x - 4)^2 + (y - 5)^2 = 67$.

Task card 4 Equations of Circles

Find the center of the circle $x^2 + y^2 - 4x - 77 = 0$.

Task card 5 Equations of Circles

A circle has center (-3, 4) and passes through the point (-1, 1). Write its equation.



Task card 6 Equations of Circles

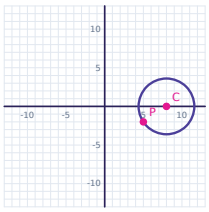
Find the radius of the circle $x^2 + y^2 - 4x + 2y + 4 = 0$.

Task card 7 Equations of Circles

Find the center of the circle $x^2 + y^2 - 8x - 12y - 29 = 0$.

Task card 8 Equations of Circles

A circle has center (8, 0) and passes through the point (5, -2). Write its equation.



Task card 9 Equations of Circles

Find the radius of the circle $x^2 + y^2 - 2x - 8y + 8 = 0$.

Task card 10 Equations of Circles

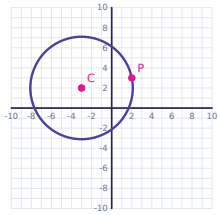
Find the radius of the circle $(x - 4)^2 + (y - 4)^2 = 59$.

Task card 11 Equations of Circles

Find the center of the circle $x^2 + y^2 + 2x - 2y - 14 = 0$.

Task card 12 Equations of Circles

A circle has center (-3, 2) and passes through the point (2, 3). Write its equation.



Task card 13 Equations of Circles

Find the radius of the circle $x^2 + y^2 + 8x - 2y - 32 = 0$.

Task card 14 Equations of Circles

Find the center of the circle $x^2 + y^2 + 12y - 28 = 0$.

Task card 15 Equations of Circles

Find the radius of the circle $x^2 + y^2 - 4x + 8y - 29 = 0$.

Task card 16 Equations of Circles

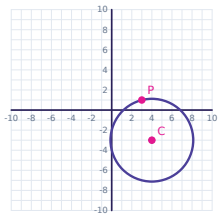
Find the radius of the circle $(x - 6)^2 + (y + 8)^2 = 73$.

Task card 17 Equations of Circles

Find the center of the circle $x^2 + y^2 + 8x - 12y + 43 = 0$.

Task card 18 Equations of Circles

A circle has center (4, -3) and passes through the point (3, 1). Write its equation.



Task card 19 Equations of Circles

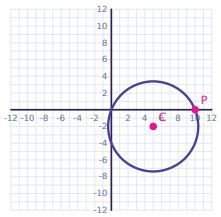
Find the radius of the circle $x^2 + y^2 + 8y + 15 = 0$.

Task card 20 Equations of Circles

Find the center of the circle $x^2 + y^2 - 12x - 6y + 41 = 0$.

Task card 21 Equations of Circles

A circle has center (5, -2) and passes through the point (10, 0). Write its equation.



Task card 22 Equations of Circles

Find the radius of the circle $x^2 + y^2 - 12x + 8y + 27 = 0$.

Task card 23 Equations of Circles

Find the radius of the circle $(x + 3)^2 + (y + 5)^2 = 34$.

Task card 24 Equations of Circles

Find the center of the circle $x^2 + y^2 - 12x - 8y + 16 = 0$.

Equations of Circles Task Cards

Recording sheet · Grade 10 · Write equations in standard form (x - h)^2 + (y - k)^2 = r^2. Write centers as (h, k). Use simplest radical form for radii that are not whole numbers.

Name: _____ Date: _____

Scan to check your answers

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

Equations of Circles Task Cards: Answer Key

Grade 10 · Hard

The answers online

1. (-2, 0)	**2.** 3	**3.** √67
4. (2, 0)	**5.** $(x + 3)^2 + (y - 4)^2 = 13$	**6.** 1
7. (4, 6)	**8.** $(x - 8)^2 + y^2 = 13$	**9.** 3
10. √59	**11.** (-1, 1)	**12.** $(x + 3)^2 + (y - 2)^2 = 26$
13. 7	**14.** (0, -6)	**15.** 7
16. √73	**17.** (-4, 6)	**18.** $(x - 4)^2 + (y + 3)^2 = 17$
19. 1	**20.** (6, 3)	**21.** $(x - 5)^2 + (y + 2)^2 = 29$
22. 5	**23.** √34	**24.** (6, 4)