

Name : _____

Score : _____

Teacher : _____

Date : _____

Writing Circle Equations

Use the given information to write the standard form equation of the circle.

1) Three Points on the Circle Are:
(-16,2), (-6,12), and (4,2)

6) $x^2 + y^2 + 30x - 28y + 385 = 0$
Translated: 5 right and 5 down

2) Center: (-5,6)
Radius: 4

7) $x^2 + 2x - 44 = -y^2 + 4y$

3) Center: (-6,-1)
Point on the Circle: (-6,-5)

8) $(x + 6)^2 + (y - 2)^2 = 49$
Translated: 2 right and 1 up

4) Center: (9,8)
Circumference: 20π

9) Center: (11,-9)
Area: 9π

5) Center: (1,-5)
Tangent to: $x = -10$

10) Ends of a Diameter:
(7,5) and (13,5)



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Writing Circle Equations

Use the given information to write the standard form equation of the circle.

- 1) Three Points on the Circle Are:

(-16,2), (-6,12), and (4,2)

$$(x + 6)^2 + (y - 2)^2 = 100$$

- 6) $x^2 + y^2 + 30x - 28y + 385 = 0$

Translated: 5 right and 5 down

$$(x + 10)^2 + (y - 9)^2 = 36$$

- 2) Center: (-5,6)

Radius: 4

$$(x + 5)^2 + (y - 6)^2 = 16$$

- 7) $x^2 + 2x - 44 = -y^2 + 4y$

$$(x + 1)^2 + (y - 2)^2 = 49$$

- 3) Center: (-6,-1)

Point on the Circle: (-6,-5)

$$(x + 6)^2 + (y + 1)^2 = 16$$

- 8) $(x + 6)^2 + (y - 2)^2 = 49$

Translated: 2 right and 1 up

$$(x + 4)^2 + (y - 3)^2 = 49$$

- 4) Center: (9,8)

Circumference: 20π

$$(x - 9)^2 + (y - 8)^2 = 100$$

- 9) Center: (11,-9)

Area: 9π

$$(x - 11)^2 + (y + 9)^2 = 9$$

- 5) Center: (1,-5)

Tangent to: $x = -10$

$$(x - 1)^2 + (y + 5)^2 = 121$$

- 10) Ends of a Diameter:

(7,5) and (13,5)

$$(x - 10)^2 + (y - 5)^2 = 9$$

