

Name : _____

Score : _____

Teacher : _____

Date : _____

Writing Circle Equations

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

1) $(x + 4)^2 + (y - 3)^2 = 100$

Translated: 4 left and 2 up

6) $x^2 + y^2 - 8x + 34y + 161 = 0$

Translated: 1 left and 5 up

2) $y^2 - 18y - 8x = -x^2 - 81$

7) Center: (-11,-3)

Radius: 4

3) Center: (-7,-2)

Circumference: 6π

8) Center: (12,4)

Point on the Circle: (15,4)

4) Three Points on the Circle Are:
(-15,-6), (-5,4), and (5,-6)

9) Center: (2,12)

Tangent to: $x = -9$

5) Ends of a Diameter:
(-10,4) and (12,4)

10) Center: (1,-10)

Area: 144π



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Writing Circle Equations

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

1) $(x + 4)^2 + (y - 3)^2 = 100$

Translated: 4 left and 2 up

$$(x + 8)^2 + (y - 5)^2 = 100$$

6) $x^2 + y^2 - 8x + 34y + 161 = 0$

Translated: 1 left and 5 up

$$(x - 3)^2 + (y + 12)^2 = 144$$

2) $y^2 - 18y - 8x = -x^2 - 81$

$$(x - 4)^2 + (y - 9)^2 = 16$$

7) Center: (-11,-3)

Radius: 4

$$(x + 11)^2 + (y + 3)^2 = 16$$

3) Center: (-7,-2)

Circumference: 6π

$$(x + 7)^2 + (y + 2)^2 = 9$$

8) Center: (12,4)

Point on the Circle: (15,4)

$$(x - 12)^2 + (y - 4)^2 = 9$$

4) Three Points on the Circle Are:

(-15,-6), (-5,4), and (5,-6)

$$(x + 5)^2 + (y + 6)^2 = 100$$

9) Center: (2,12)

Tangent to: $x = -9$

$$(x - 2)^2 + (y - 12)^2 = 121$$

5) Ends of a Diameter:

(-10,4) and (12,4)

$$(x - 1)^2 + (y - 4)^2 = 121$$

10) Center: (1,-10)

Area: 144π

$$(x - 1)^2 + (y + 10)^2 = 144$$

