SM2 6.5: Standard Form of a Circle

Name_____ ID: 1

Date_____ Period____

Use the information provided to write the standard form equation of each circle.

1) $x^2 + y^2 + 8x - 6y + 16 = 0$

2) $x^2 + y^2 + 2x + 6y - 71 = 0$

3) $x^2 + y^2 - 24x + 6y + 152 = 0$

4) $x^2 + y^2 + 8y - 33 = 0$

5) $x^2 + y^2 - 20x + 28y + 280 = 0$

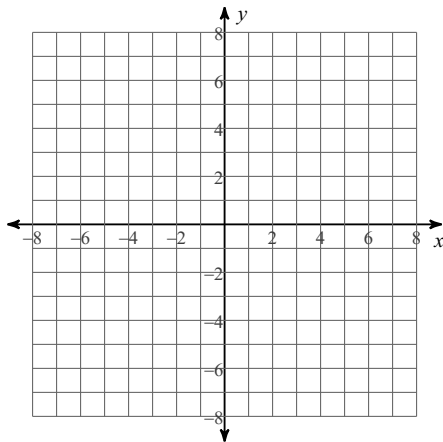6) $x^2 + y^2 - 18x - 30y + 297 = 0$

7) $x^2 + y^2 + 22x + 120 = 0$

8) $x^2 + y^2 - 14x - 12y + 21 = 0$

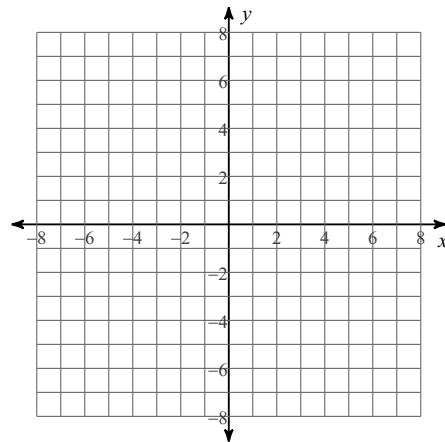9) $x^2 + y^2 + 24x - 12y + 155 = 0$

10) $x^2 + y^2 + 6x - 72 = 0$

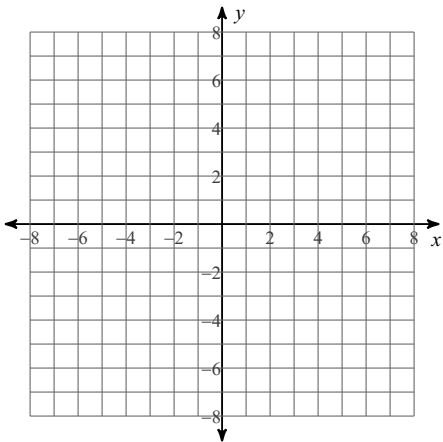**Write its circle equation in standard form, and sketch its graph.**

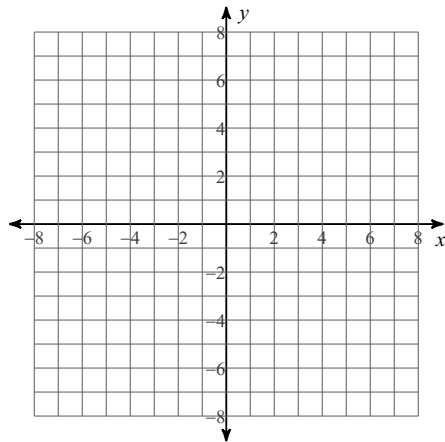11) $x^2 + y^2 + 6x - 8y + 21 = 0$

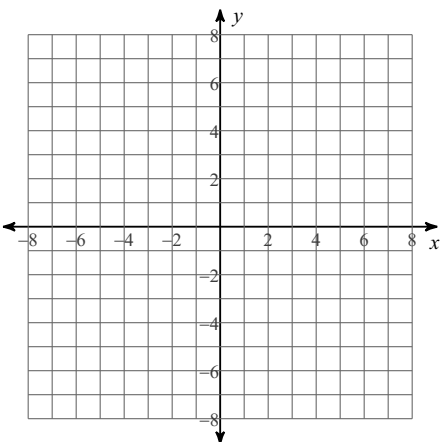12) $x^2 + y^2 - 6x + 2y + 2 = 0$

13) $x^2 + y^2 + 8x - 4y + 16 = 0$

14) $4x^2 + 4y^2 - 12x - 32y + 69 = 0$

15) $x^2 + y^2 + 2x - 6y + 2 = 0$

16) $x^2 + y^2 - 4x = 0$