Bellwork

Alg 2B Monday, March 19, 2018

1. Complete the square:  $x^2 + 8x + ___ = 3 + ___$ 

becomes  $(x + ___)^2 = ____$ 

2. What are the coordinates of the center and the radius of this circle?  $(x+6)^2 + (x-7)^2 = 11$ 

Center:

Radius =

3. 
$$x^2 + y^2 + 4x - 2y = -1$$

The equation of a circle in the xy-plane is shown above. What is the radius of the circle?

- A) 2 B) 3
- C) 4
- D) 9

4. A reasearcher conducted a survey to determine whether people in a certain large town prefer watching sports on television to attending the sporting event. The researcher asked 117 people who visited a local restaurant on a Saturday, and 7 people refused to respond. Which of the following factors makes it least likely that a reliable conclusion can be drawn about the sports-watching preferences of all people in the town?

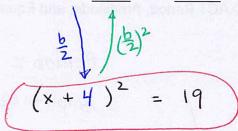
- A) Sample size
- B) Population size
- C) The number of people who refused to respond
- D) Where the survey was given

Alg 2B

Monday, March 19, 2018

/ANSWERS

- 1. Complete the square:  $x^2 + 8x + 16 = 3 + 16$
- becomes  $(x + ___)^2 = ___$



2. What are the coordinates of the center and the radius of this circle?  $(x+6)^2 + (x-7)^2 = 11$ 

Center: (-6, 7) Radius =  $\sqrt{11}$ 

 $(x-h)^{2} + (y-k)^{2} = r^{2}$ center: (h,k)radius = r

3.  $x^2 + y^2 + 4x - 2y = -1$ 

The equation of a circle in the xy-plane is shown above. What is the radius of the circle?

(A) 2

B) 3 C) 4 D) 9

· complete the square for both x 2. y

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

- 4. A reasearcher conducted a survey to determine whether people in a certain large town prefer watching sports on television to attending the sporting event. The researcher asked 117 people who visited a local restaurant on a Saturday, and 7 people refused to respond. Which of the following factors makes it least likely that a reliable conclusion can be drawn about the sports-watching preferences of all people in the town?
- A) Sample size
- B) Population size
- C) The number of people who refused to respond
- D) Where the survey was given

For a survey to give good results a survey must randomly select people representative of the entire population. Since only people at a particular restaurant are asked its likely than a sample of the entire population isn't represented equally.