

Question 2:

Which of the following is the equation of an ellipse with center $(-2, 3)$ and with major or x-radius length 5 units and minor or y-radius length 6 units?

A. $\frac{(x+2)^2}{10} + \frac{(y-3)^2}{12} = 1$

Incorrect. Center is correct, but x- and y-radii must be the square roots of the numbers in the equation.

B. $\frac{(x+2)^2}{25} + \frac{(y-3)^2}{36} = 1$

Correct! $h = -2$ and $k = 3$; center $(-2, 3)$; major radius $= \sqrt{36} = 6$ and minor radius $= \sqrt{25} = 5$

C. $\frac{(x+2)^2}{36} + \frac{(y-3)^2}{25} = 1$

Incorrect. check the major and minor radius values.

D. $\frac{(x+3)^2}{25} + \frac{(y-2)^2}{36} = 1$

Incorrect. The center of this ellipse will be $(-3, 2)$