

Correct. One way to solve this triangle is to use the definition of sine to find x :

$$\frac{x}{6} = \sin 33^\circ \approx 0.545 \Rightarrow x \approx 6(0.545) = 3.27 \approx 3.3$$

To find y , you can either use another trigonometric function (such as cosine) or you can use the Pythagorean Theorem:

$$y^2 + 3.3^2 \approx 6^2 \Rightarrow y^2 + 10.89 \approx 36 \Rightarrow y^2 \approx 25.11 \Rightarrow y \approx 5.01 \approx 5.0$$

The two acute angles are complementary, so $m\angle B = 90^\circ - 33^\circ = 57^\circ$.