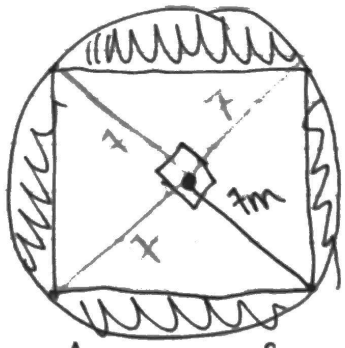
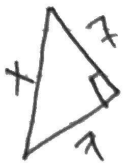
LTG7a Shaded regions

How do I find the areas of Shaded regions?

3/23

Ex1:





$7^2 + 7^2 = x^2$

$\sqrt{98} = x^2$

9.9

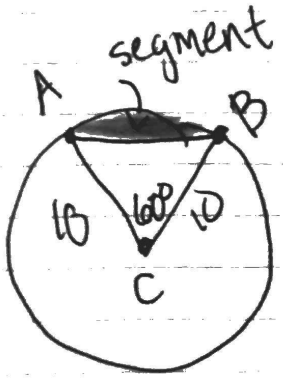
Shaded region = Area of whole shape (circle) − area of shape inside (square)

$\pi \cdot 7^2$ $\qquad$ $A = s^2$

153.94 − $9.9^2 = 98$

153.94 − 98 = 55.94 is the area of the shaded region

Ex2:



Find the area of the segment (shaded)

Area of sector $\frac{60}{360} \cdot 10^2 \cdot \pi$ − Area of Triangle $\frac{1}{2} \cdot a \cdot b \cdot \sin C$

$\frac{1}{2} \cdot 10 \cdot 10 \cdot \sin 60$

52.36 − 43.3

= 9.06 units^2