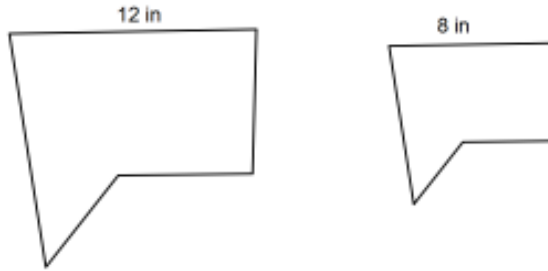


Round to the nearest hundredth when needed unless noted otherwise.

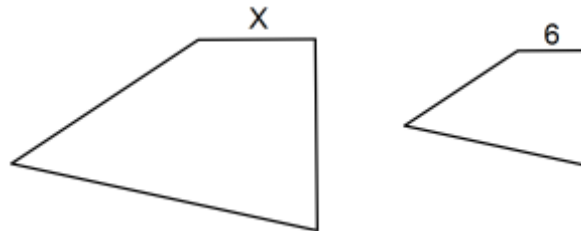
1. The given figures are similar.



- a) If the perimeter of the smaller figure is 200 in. find the perimeter of the larger figure.

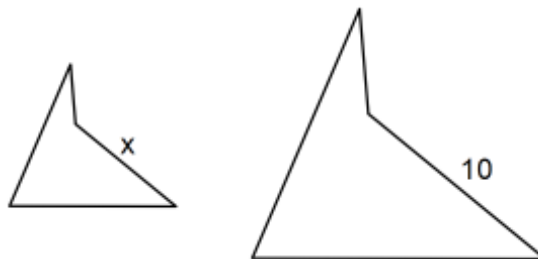
- b) If the area of the bigger figure is 640 in^2 find the area of the smaller figure.

2. The figures shown are similar.



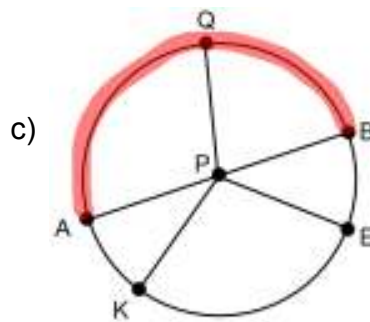
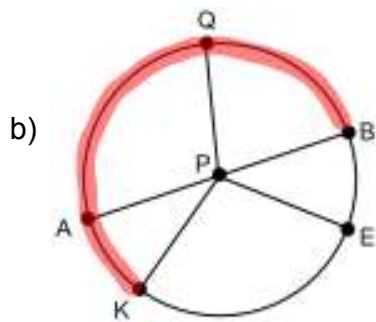
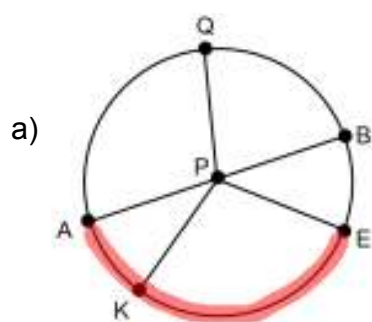
Find the value of x if the perimeter of the smaller figure is 32 ft and the perimeter of the larger figure is 40 ft.

3. The figures shown are similar.

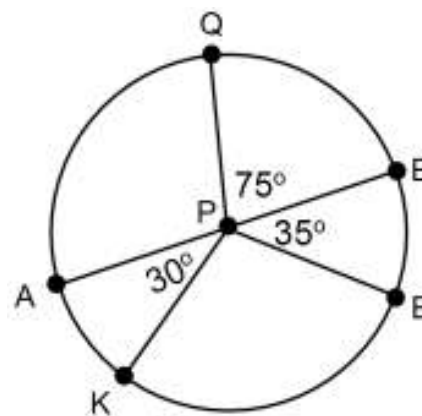


Find the value of x if the area of the larger figure is 240 cm^2 and the area of the smaller figure is 96 cm^2 .

4. Name the highlighted arcs in circle P. \overline{AB} is a diameter in each circle.



5. Find the measure of each arc. \overline{AB} is a diameter in circle P.



a) $m\widehat{KE} =$

b) $m\widehat{EBA} =$

c) $m\widehat{KQE} =$

6. Using the same circle as problem #5 fill in the blanks to make a true statement.

a) $\widehat{AK} + \underline{\hspace{2cm}} = \widehat{AEB}$

b) $\widehat{EBA} + \widehat{AK} = \underline{\hspace{2cm}}$

c) $\widehat{QBK} - \widehat{EK} = \underline{\hspace{2cm}}$

7. Use the circle from problem #5.

a) If $AB = 8$ ft. find the length of \widehat{QB} to the nearest hundredth.

b). If the length of $\widehat{AK} = 20$ cm find the radius of the circle.

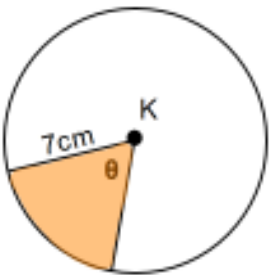
8. The circumference of a circle is 40 in. Find the radius to the nearest hundredth.

9. The radius of a circle is 50 in. Find the area to the nearest hundredth.

10. The area of a circle is 275 cm^2 . Find the diameter to the nearest hundredth.

11. Use the circle from problem #5. $PE = 9 \text{ ft}$. Find the area of the sector formed by \overline{PQ} , \overline{PE} and \widehat{QE} to the nearest hundredth.

12. If the area of the shaded sector in circle K is 25 cm^2 find the measure of central angle θ to the nearest hundredth of a degree.



13. Find the area of the shaded segment in circle M to the nearest hundredth.

