Area of Sectors and Segments of a Circle

 $\bf Sector\ of\ a\ Circle:$ a region in the circle bounded by two radii and the minor arc they determine

The area of a sector is represented by $A = \frac{n}{360}\pi r^2$, where n is the number of degrees in the central angle of a sector.

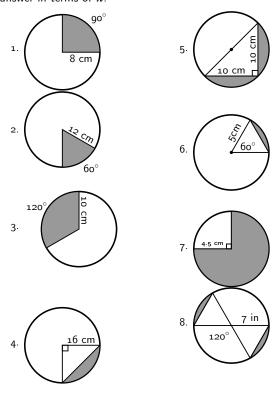
Segment of a Circle: a region bounded by an arc and the chord of the arc

The area of a segment of a circle is found by subtracting the area of a triangle from the area of a sector.

$$\mathsf{A}_{segment} = \mathsf{A}_{sector} - \mathsf{A}_{triangle}$$

Practice Exercises

Find the area of each shaded region/s in each figure. Express your answer in terms of π .



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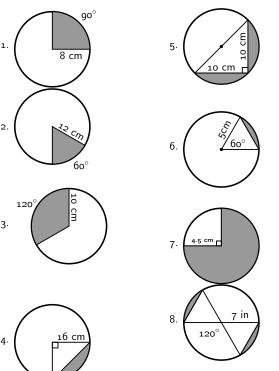
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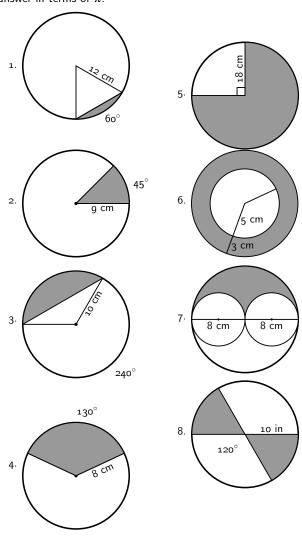
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Problem Set

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