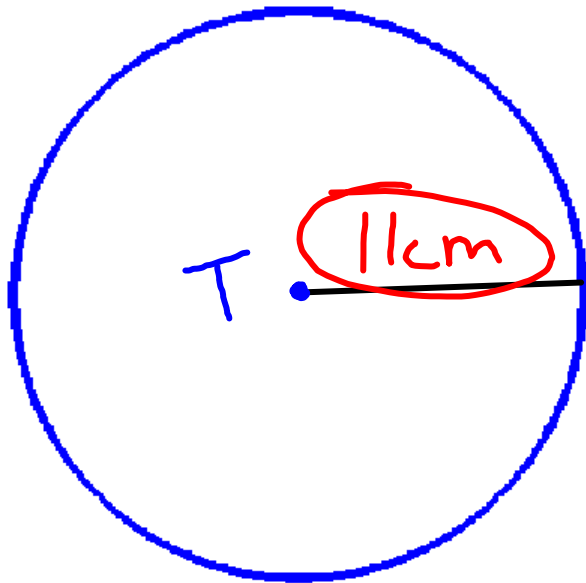


# Area of Shaded Regions w/ Circles

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May 10, 2007



$$A_{\text{circle}} = \pi r^2$$

$$= \pi (11\text{cm})^2$$

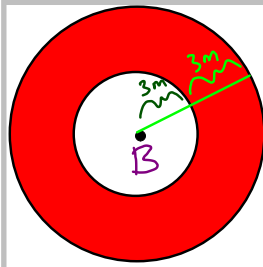
$$= \underline{\underline{121\pi\text{cm}^2}}$$

→ exact Ans.

$$\approx \underline{121(3.14)}\text{cm}^2$$

$$\approx \underline{\underline{379.94\text{cm}^2}}$$

→ approx. ans.



These Two Circles have the Same Center B

Find the Area of the Shaded (Red) Region.

$A_{\odot BB}$  → The Big Red  $\odot$

$A_{\odot LB}$  → The little White  $\odot$

$$A_{SR} = A_{\odot BB} - A_{\odot LB}$$

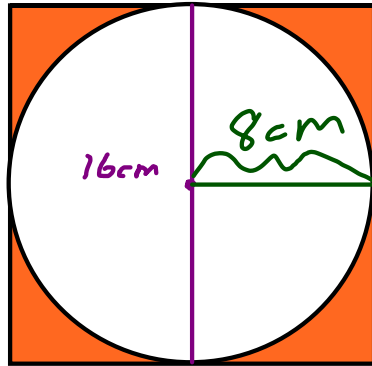
$$\begin{aligned} A_{\odot BB} &= \pi r^2 \\ &= \pi (6m)^2 \\ &= \underline{36\pi m^2} \end{aligned}$$

$$\begin{aligned} A_{\odot LB} &= \pi r^2 \\ &= \pi (3m)^2 \\ &= \underline{9\pi m^2} \end{aligned}$$

$$\begin{aligned} A_{SR} &= A_{\odot BB} - A_{\odot LB} \\ &= 36\pi m^2 - 9\pi m^2 \\ &= 27\pi m^2 \rightarrow \text{exact Ans.} \end{aligned}$$

$$\begin{aligned} &\approx 27(3.14) m^2 \\ &\approx \underline{84.78 m^2} \rightarrow \text{approx Ans.} \end{aligned}$$

## Circle in a Square



$$A_{SR} = A_{sq} - A_{\odot}$$

$$A_{\odot} = \pi r^2$$
$$= \pi (8\text{cm})^2$$

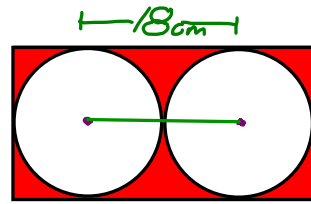
$$= 64\pi\text{cm}^2 \approx 64(3.14)\text{cm}^2 \approx 200.96\text{cm}^2$$

$$A_{sq} = s \cdot s$$
$$= (16\text{cm})(16\text{cm})$$
$$= \underline{256\text{cm}^2}$$

$$A_{SR} = A_{sq} - A_{\odot}$$

$$\approx 256\text{cm}^2 - 200.96\text{cm}^2$$

$$\approx \underline{\underline{55.04\text{cm}^2}}$$



2 congruent  $\odot$ 's  
inside a Rectangle

O.T.L.

① Finish & Due the last S.R. Problem.

① pg 263: Challenge:  
5-8 (all)

② If you have not already, I must have a  $8\frac{1}{2} \times 11$  Sketch of your poster design!