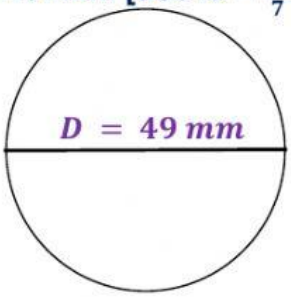
NAME_____ DATE _____

CIRCUMFERENCE AND LENGTH OF ARC

Complete the following by filling in the values.

1. Find the circumference of a circle of diameter 49 mm. [use $\pi = \frac{22}{7}$]



Solution:

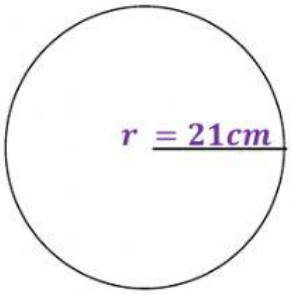
Using $C = \pi D$

$C =$ _____ × _____

$=$ _____ × _____ $=$ _____ mm

2. Calculate the circumference of a circle given a radius of 21 cm.

Solution

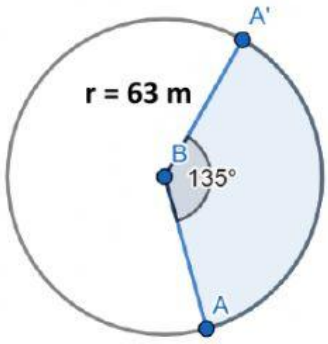


Using $C = 2\pi r$

$C =$ ___ × ____ × _____

$C =$ _____ × ____ × _____ $=$ _____cm

3. Calculate the arc length of the sector shown.



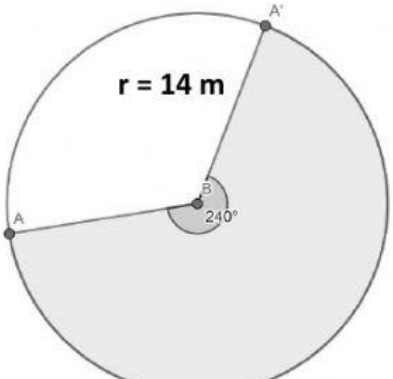
Solution: Using $l = 2\pi r \frac{\theta}{360°}$

$l =$ ___ × ____ × ___ × $\frac{____°}{360°}$

$l =$ ___ × ____ × ___ × $\frac{3}{8} =$ _____

$=$ _____ m

4. Calculate the arc length of the sector shown.
[angle = 240°]



Solution: Using $l = 2\pi r \frac{\theta}{360°}$

$l =$ ___ × ____ × ___ × $\frac{____°}{360°}$

$l =$ ____ × ____ × ____ × $\frac{2}{3} =$ _____

$=$ _____ m