

## Check Your Understanding – Angles and Trig Ratios

Answer the questions in the space provided.

1. Draw the following angles in standard position. In which quadrant does the terminal arm lie?

a)  $586^\circ$

b)  $-\frac{8\pi}{3}$

2. Write the following angles in decreasing order of magnitude. Justify your answer.

$618^\circ$

$\frac{9\pi}{10}$

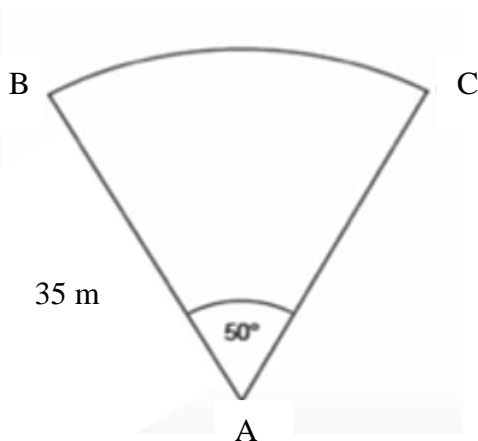
$\frac{14\pi}{3}$

$4.45$

3. Determine all angles that are coterminal in the given domain.

$207^\circ, -420^\circ \leq \theta \leq 1000^\circ$

4. Bubba is marking a sector of a circle on a sports field as shown below. What is the perimeter of the sector? Show your work and round your answer to the nearest tenth of a meter.



5. State the general expression for all angles coterminal with  $\frac{5\pi}{9}$ .
6. If  $\sin \theta = -\frac{3}{7}$  and  $\cos \theta > 0$  determine the *exact values* of the other 5 trigonometric ratios. *include a neatly labelled diagram and show your work.*