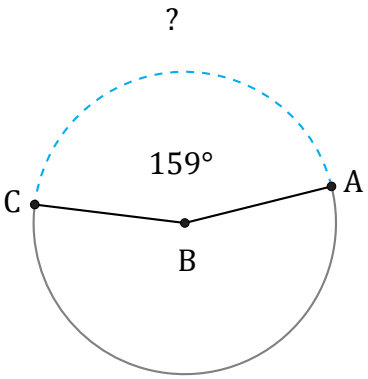
Arc Lengths and Angles (I)

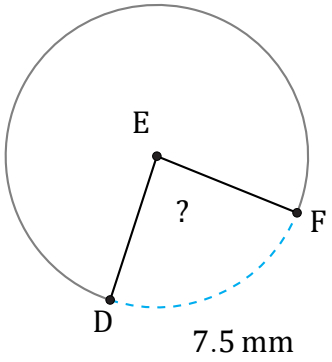
Name: _____ Date: _____

Calculate each arc length or angle measurement.



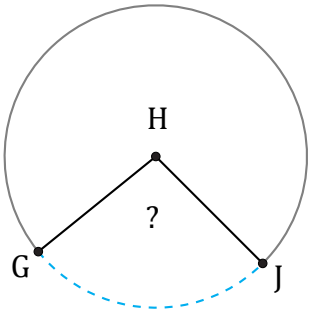
Radius = 29 mi

$\overset{\frown}{AC}$ =



Radius = 5 mm

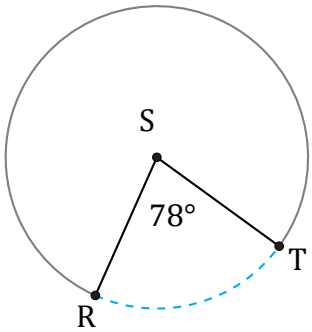
∠DEF =



542.87 mm

Circumference = 2035.75 mm

∠GHJ =



?

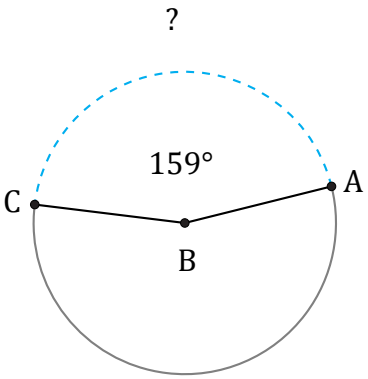
Diameter = 2 mm

$\overset{\frown}{RT}$ =

Arc Lengths and Angles (I) Answers

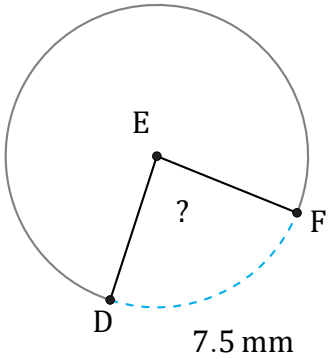
Name: _____ Date: _____

Calculate each arc length or angle measurement.



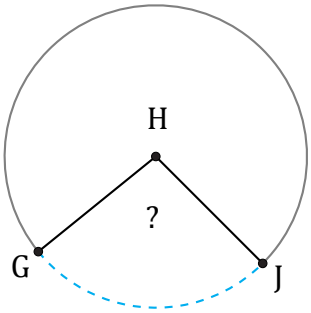
Radius = 29 mi

$\overset{\frown}{AC} = \frac{159}{360} \times \pi \times 29 \times 2 = 80.48$ mi



Radius = 5 mm

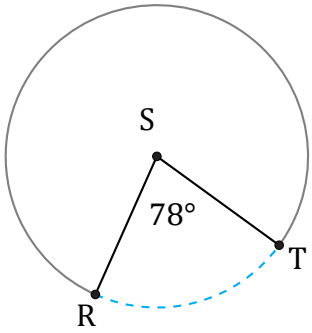
$\angle DEF = \frac{7.5}{5 \times \pi \times 2} \times 360 = 85.9°$



542.87 mm

Circumference = 2035.75 mm

$\angle GHJ = \frac{542.87}{2035.75} \times 360 = 96°$



?

Diameter = 2 mm

$\overset{\frown}{RT} = \frac{78}{360} \times \pi \times 2 = 1.36$ mm