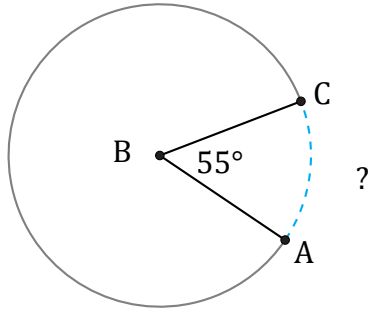


Arc Lengths and Angles (A)

Name: _____

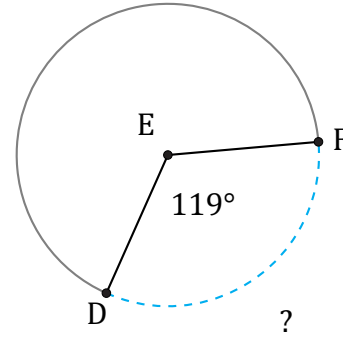
Date: _____

Calculate each arc length or angle measurement.



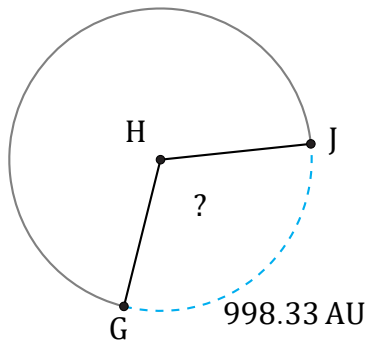
Radius = 925 in

$\widehat{AC} =$



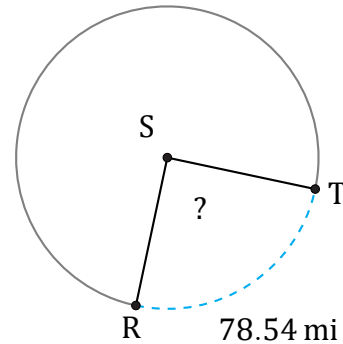
Diameter = 24 mm

$\widehat{DF} =$



Radius = 520 AU

$\angle GHJ =$



Diameter = 100 mi

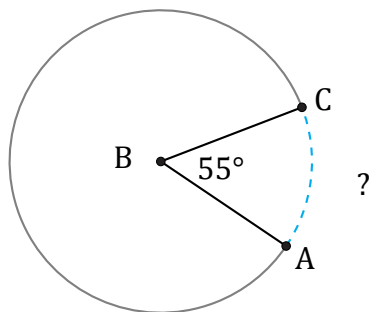
$\angle RST =$

Arc Lengths and Angles (A) Answers

Name: _____

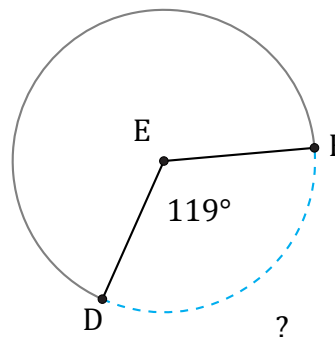
Date: _____

Calculate each arc length or angle measurement.



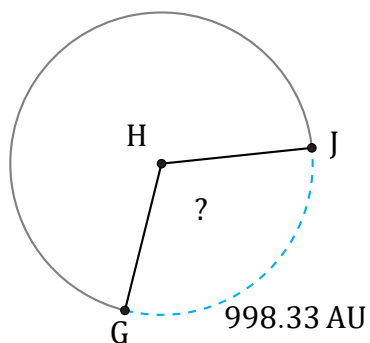
Radius = 925 in

$$\widehat{AC} = \frac{55}{360} \times \pi \times 925 \times 2 = 887.94 \text{ in}$$



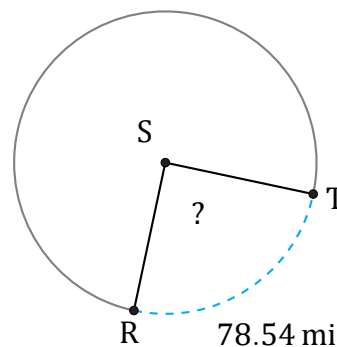
Diameter = 24 mm

$$\widehat{DF} = \frac{119}{360} \times \pi \times 24 = 24.92 \text{ mm}$$



Radius = 520 AU

$$\angle GHJ = \frac{998.33}{520 \times \pi \times 2} \times 360 = 110^\circ$$



Diameter = 100 mi

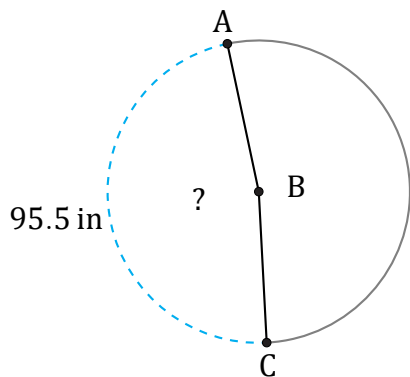
$$\angle RST = \frac{78.54}{100 \times \pi} \times 360 = 90^\circ$$

Arc Lengths and Angles (B)

Name: _____

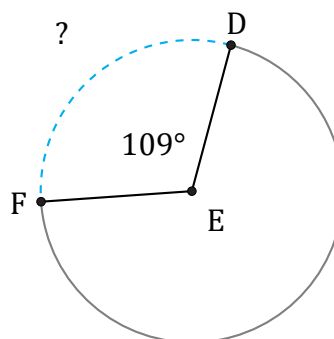
Date: _____

Calculate each arc length or angle measurement.



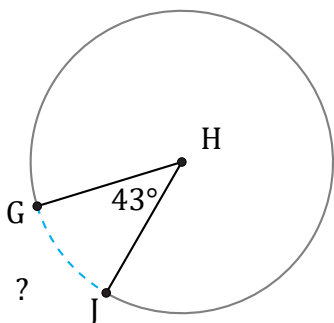
Diameter = 64 in

$\angle ABC =$



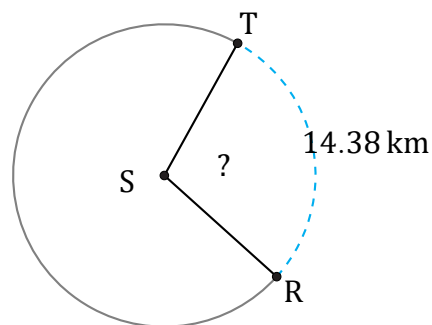
Radius = 394 cm

$\widehat{DF} =$



Diameter = 364 cm

$\widehat{GJ} =$



Radius = 8 km

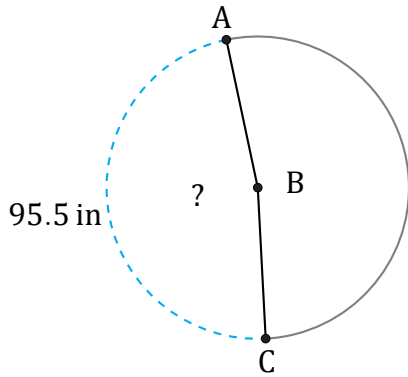
$\angle RST =$

Arc Lengths and Angles (B) Answers

Name: _____

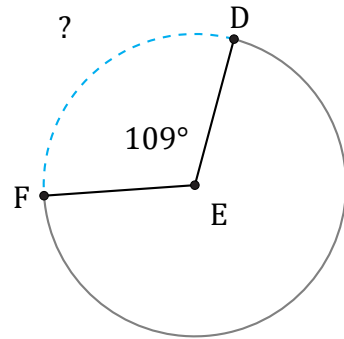
Date: _____

Calculate each arc length or angle measurement.



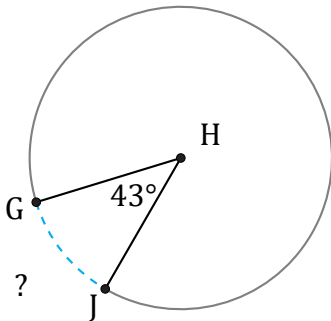
Diameter = 64 in

$$\angle ABC = \frac{95.5}{64 \times \pi} \times 360 = 171^\circ$$



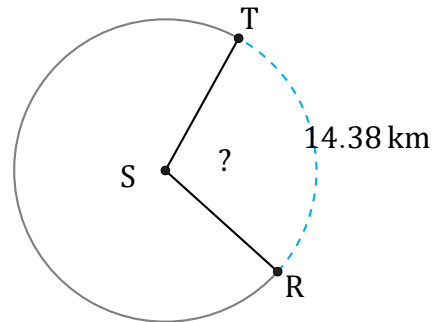
Radius = 394 cm

$$\widehat{DF} = \frac{109}{360} \times \pi \times 394 \times 2 = 749.55 \text{ cm}$$



Diameter = 364 cm

$$\widehat{GJ} = \frac{43}{360} \times \pi \times 364 = 136.59 \text{ cm}$$



Radius = 8 km

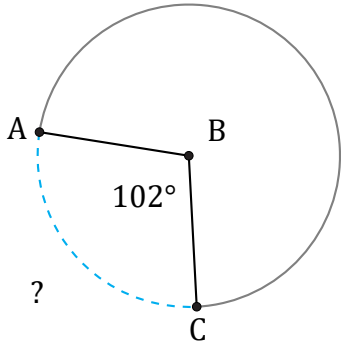
$$\angle RST = \frac{14.38}{8 \times \pi \times 2} \times 360 = 103^\circ$$

Arc Lengths and Angles (C)

Name: _____

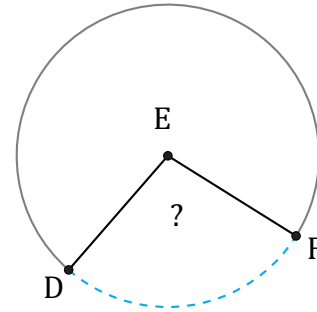
Date: _____

Calculate each arc length or angle measurement.



Radius = 54 cm

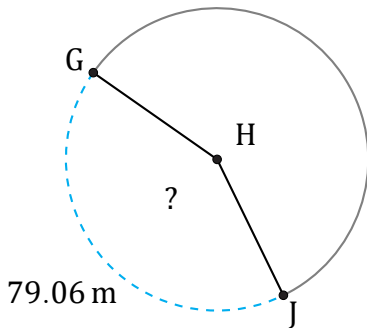
$\widehat{AC} =$



6.91 AU

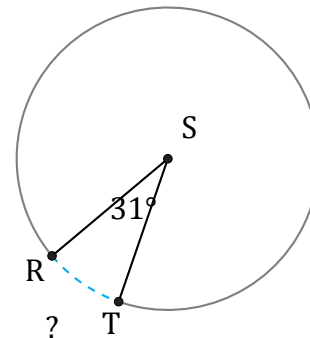
Diameter = 8 AU

$\angle DEF =$



Diameter = 60 m

$\angle GHJ =$



Radius = 7 mi

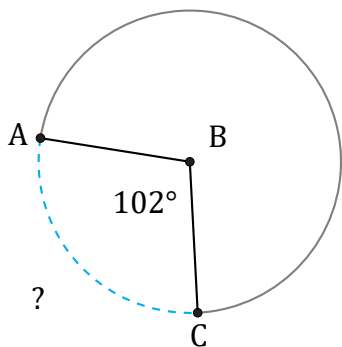
$\widehat{RT} =$

Arc Lengths and Angles (C) Answers

Name: _____

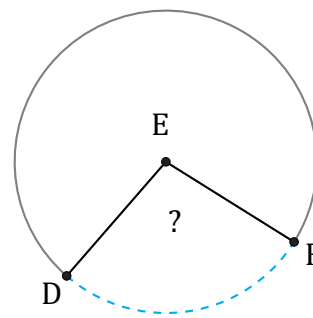
Date: _____

Calculate each arc length or angle measurement.



Radius = 54 cm

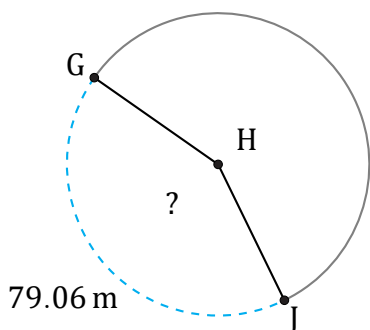
$$\widehat{AC} = \frac{102}{360} \times \pi \times 54 \times 2 = 96.13 \text{ cm}$$



6.91 AU

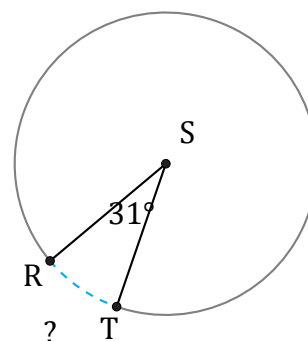
Diameter = 8 AU

$$\angle DEF = \frac{6.91}{8 \times \pi} \times 360 = 99^\circ$$



Diameter = 60 m

$$\angle GHJ = \frac{79.06}{60 \times \pi} \times 360 = 151^\circ$$



Radius = 7 mi

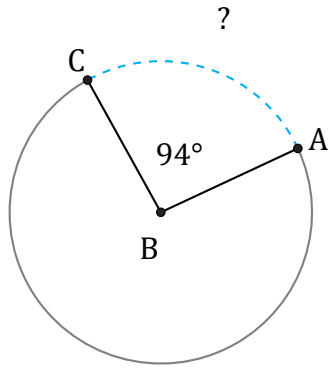
$$\widehat{RT} = \frac{31}{360} \times \pi \times 7 \times 2 = 3.79 \text{ mi}$$

Arc Lengths and Angles (D)

Name: _____

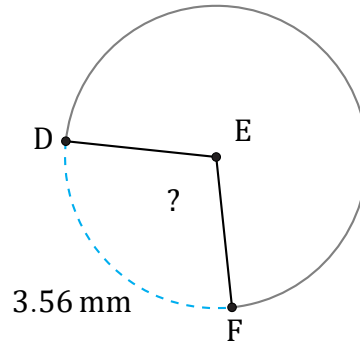
Date: _____

Calculate each arc length or angle measurement.



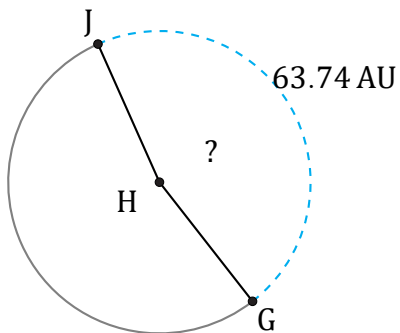
Diameter = 8 ft

$\widehat{AC} =$



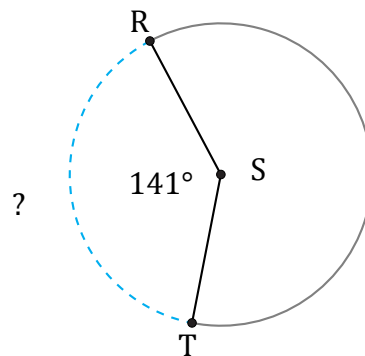
Radius = 2 mm

$\angle DEF =$



Radius = 22 AU

$\angle GHJ =$



Diameter = 114 in

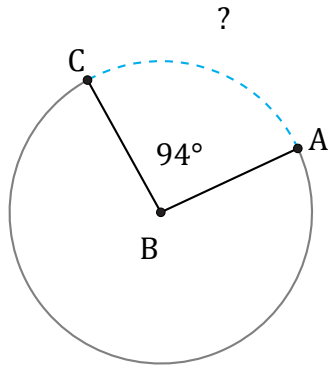
$\widehat{RT} =$

Arc Lengths and Angles (D) Answers

Name: _____

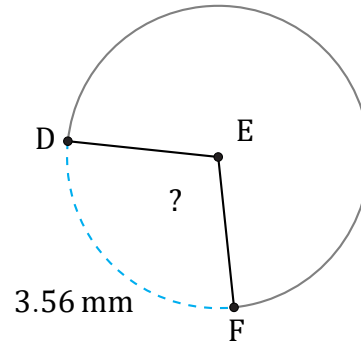
Date: _____

Calculate each arc length or angle measurement.



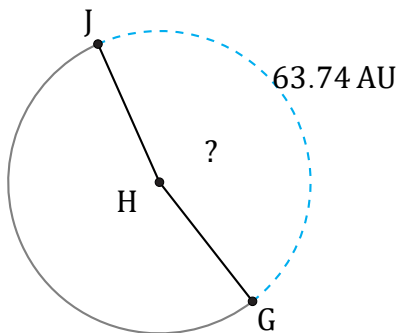
Diameter = 8 ft

$$\widehat{AC} = \frac{94}{360} \times \pi \times 8 = 6.56 \text{ ft}$$



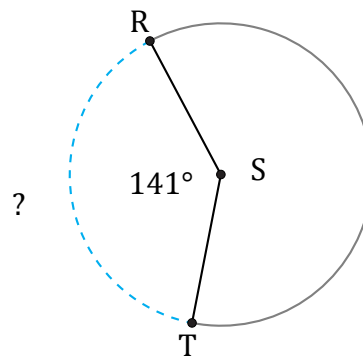
Radius = 2 mm

$$\angle DEF = \frac{3.56}{2 \times \pi \times 2} \times 360 = 102^\circ$$



Radius = 22 AU

$$\angle GHJ = \frac{63.74}{22 \times \pi \times 2} \times 360 = 166^\circ$$



Diameter = 114 in

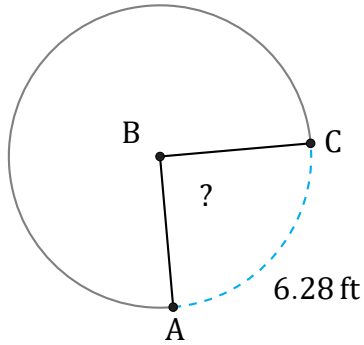
$$\widehat{RT} = \frac{141}{360} \times \pi \times 114 = 140.27 \text{ in}$$

Arc Lengths and Angles (E)

Name: _____

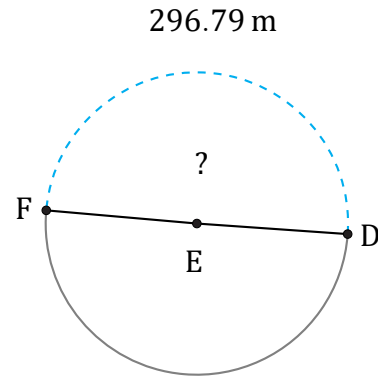
Date: _____

Calculate each arc length or angle measurement.



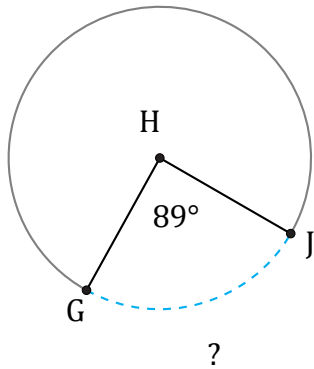
Diameter = 8 ft

$\angle ABC =$



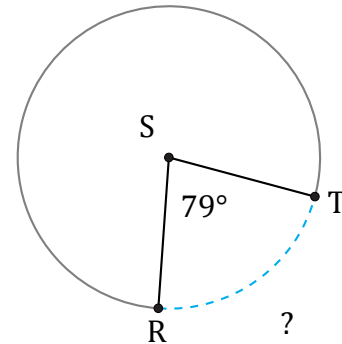
Radius = 95 m

$\angle DEF =$



Radius = 96 mm

$\widehat{GJ} =$



Diameter = 1388 in

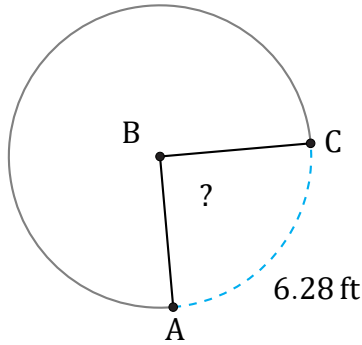
$\widehat{RT} =$

Arc Lengths and Angles (E) Answers

Name: _____

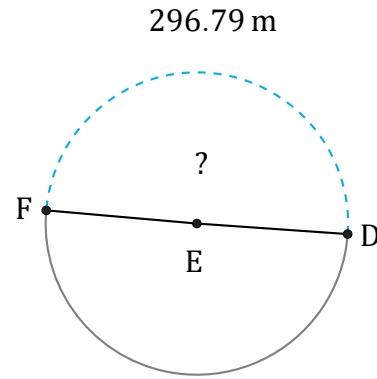
Date: _____

Calculate each arc length or angle measurement.



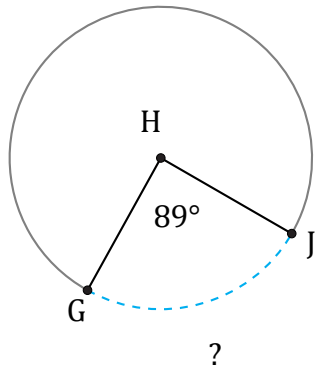
Diameter = 8 ft

$$\angle ABC = \frac{6.28}{8 \times \pi} \times 360 = 90^\circ$$



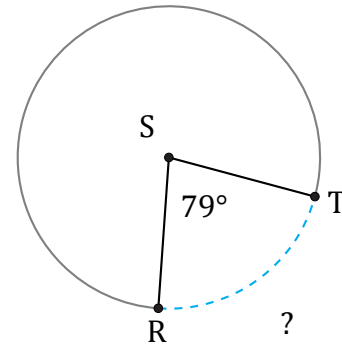
Radius = 95 m

$$\angle DEF = \frac{296.79}{95 \times \pi \times 2} \times 360 = 179^\circ$$



Radius = 96 mm

$$\widehat{GJ} = \frac{89}{360} \times \pi \times 96 \times 2 = 149.12 \text{ mm}$$



Diameter = 1388 in

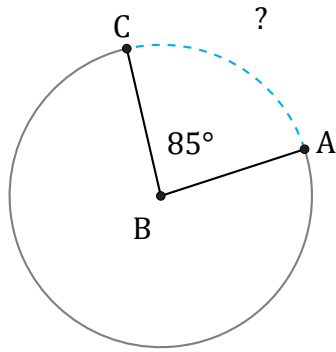
$$\widehat{RT} = \frac{79}{360} \times \pi \times 1388 = 956.89 \text{ in}$$

Arc Lengths and Angles (F)

Name: _____

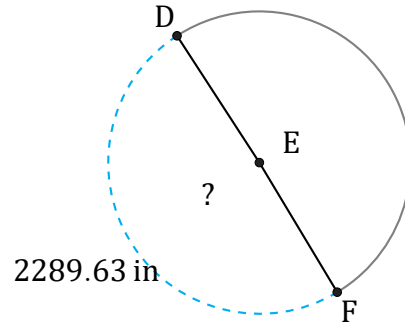
Date: _____

Calculate each arc length or angle measurement.



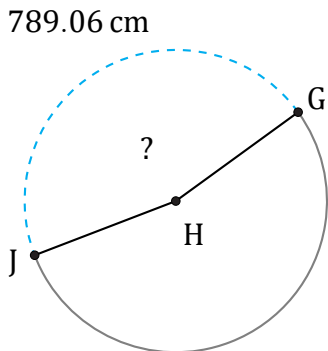
Diameter = 1086 ft

$\widehat{AC} =$



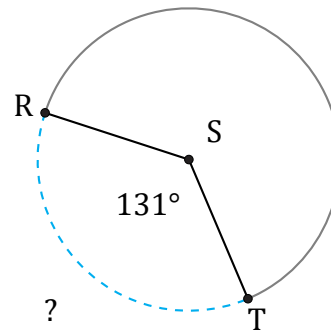
Radius = 737 in

$\angle DEF =$



Diameter = 548 cm

$\angle GHJ =$



Radius = 10 cm

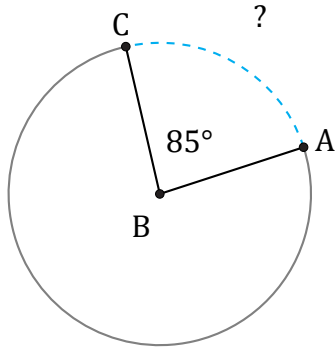
$\widehat{RT} =$

Arc Lengths and Angles (F) Answers

Name: _____

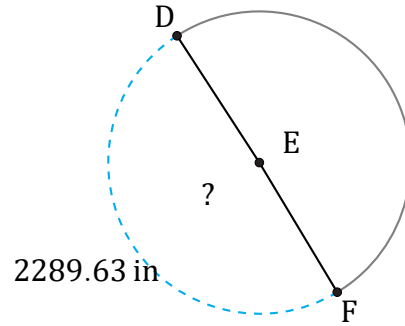
Date: _____

Calculate each arc length or angle measurement.



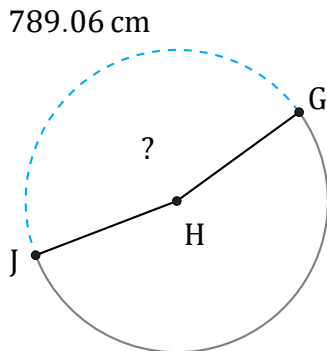
Diameter = 1086 ft

$$\widehat{AC} = \frac{85}{360} \times \pi \times 1086 = 805.56 \text{ ft}$$



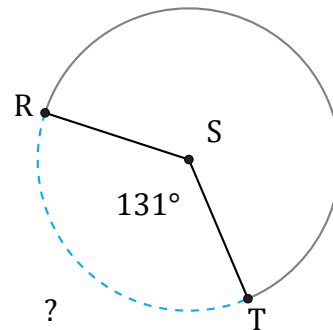
Radius = 737 in

$$\angle DEF = \frac{2289.63}{737 \times \pi \times 2} \times 360 = 178^\circ$$



Diameter = 548 cm

$$\angle GHJ = \frac{789.06}{548 \times \pi} \times 360 = 165^\circ$$



Radius = 10 cm

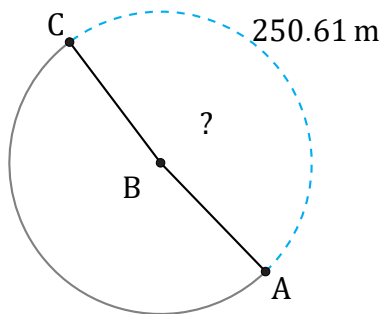
$$\widehat{RT} = \frac{131}{360} \times \pi \times 10 \times 2 = 22.86 \text{ cm}$$

Arc Lengths and Angles (G)

Name: _____

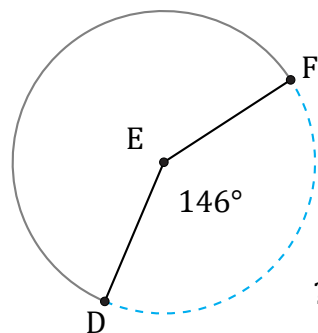
Date: _____

Calculate each arc length or angle measurement.



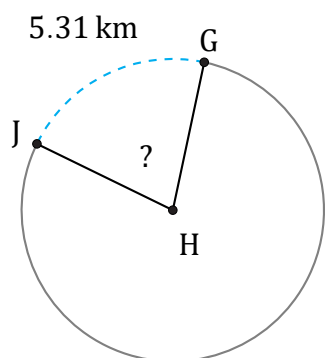
Diameter = 166 m

$\angle ABC =$



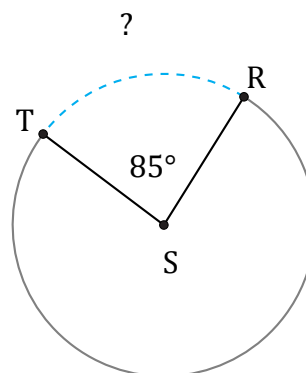
Diameter = 64 in

$\widehat{DF} =$



Radius = 4 km

$\angle GHJ =$



Radius = 6 mm

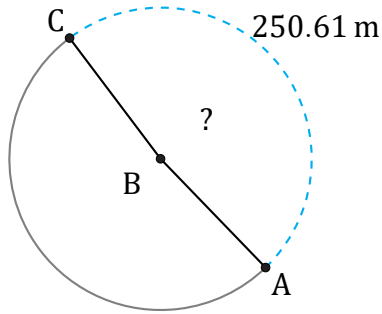
$\widehat{RT} =$

Arc Lengths and Angles (G) Answers

Name: _____

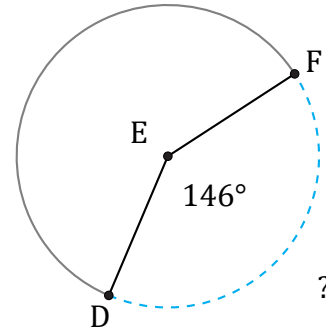
Date: _____

Calculate each arc length or angle measurement.



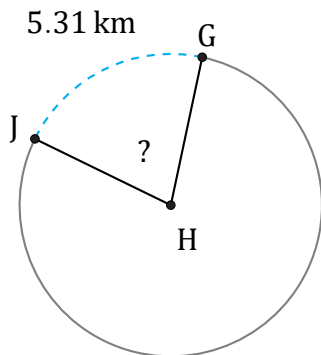
Diameter = 166 m

$$\angle ABC = \frac{250.61}{166 \times \pi} \times 360 = 173^\circ$$



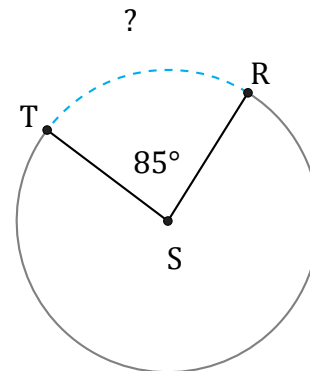
Diameter = 64 in

$$\widehat{DF} = \frac{146}{360} \times \pi \times 64 = 81.54 \text{ in}$$



Radius = 4 km

$$\angle GHJ = \frac{5.31}{4 \times \pi \times 2} \times 360 = 76.1^\circ$$



Radius = 6 mm

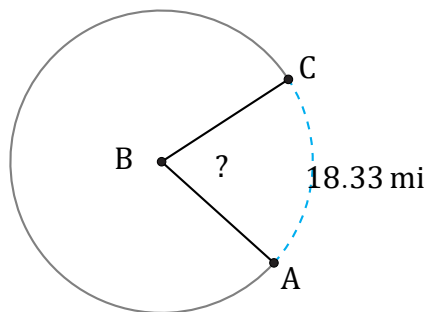
$$\widehat{RT} = \frac{85}{360} \times \pi \times 6 \times 2 = 8.9 \text{ mm}$$

Arc Lengths and Angles (H)

Name: _____

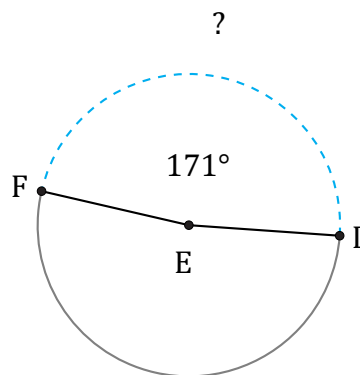
Date: _____

Calculate each arc length or angle measurement.



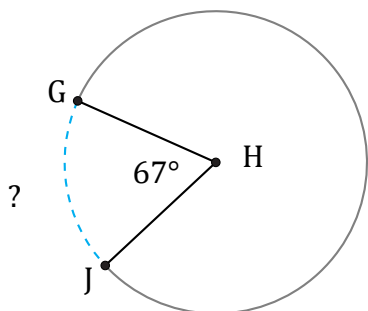
Radius = 14 mi

$\angle ABC =$



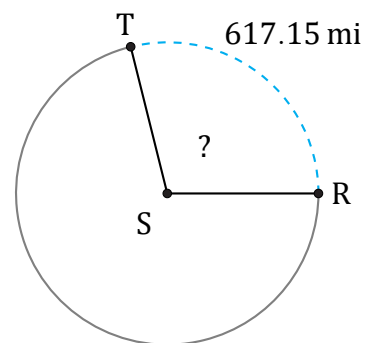
Diameter = 18 km

$\widehat{DF} =$



Radius = 843 mm

$\widehat{GJ} =$



Diameter = 680 mi

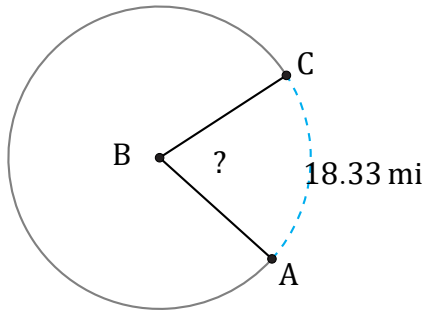
$\angle RST =$

Arc Lengths and Angles (H) Answers

Name: _____

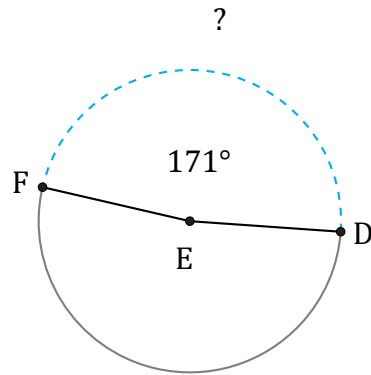
Date: _____

Calculate each arc length or angle measurement.



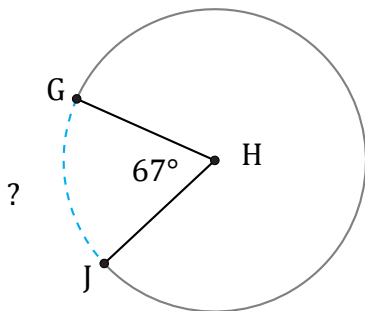
Radius = 14 mi

$$\angle ABC = \frac{18.33}{14 \times \pi \times 2} \times 360 = 75^\circ$$



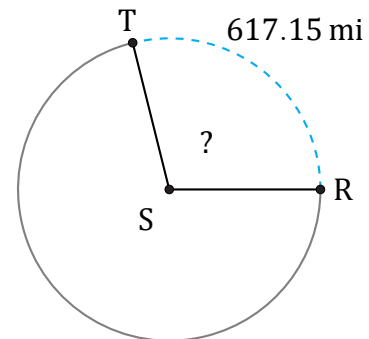
Diameter = 18 km

$$\widehat{DF} = \frac{171}{360} \times \pi \times 18 = 26.86 \text{ km}$$



Radius = 843 mm

$$\widehat{GJ} = \frac{67}{360} \times \pi \times 843 \times 2 = 985.78 \text{ mm}$$



Diameter = 680 mi

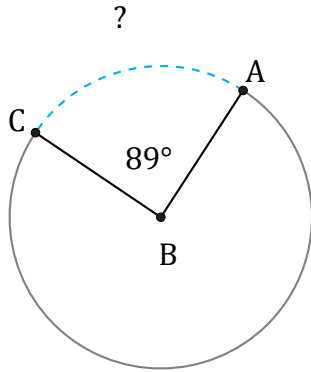
$$\angle RST = \frac{617.15}{680 \times \pi} \times 360 = 104^\circ$$

Arc Lengths and Angles (I)

Name: _____

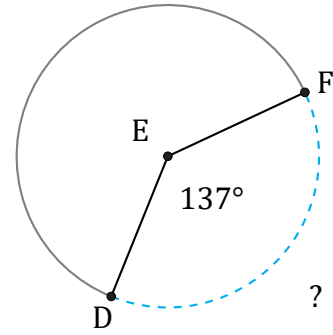
Date: _____

Calculate each arc length or angle measurement.



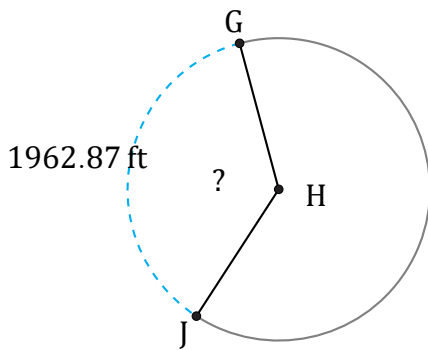
Radius = 7 km

$\widehat{AC} =$



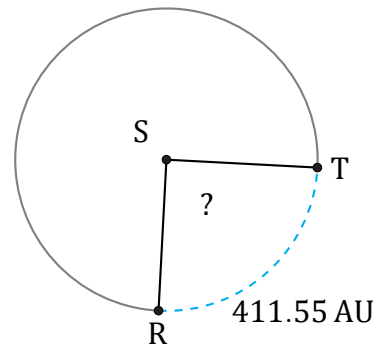
Diameter = 188 ft

$\widehat{DF} =$



Diameter = 1704 ft

$\angle GHJ =$



Radius = 262 AU

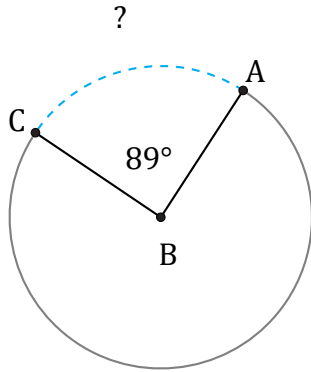
$\angle RST =$

Arc Lengths and Angles (I) Answers

Name: _____

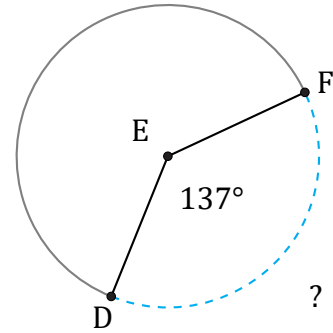
Date: _____

Calculate each arc length or angle measurement.



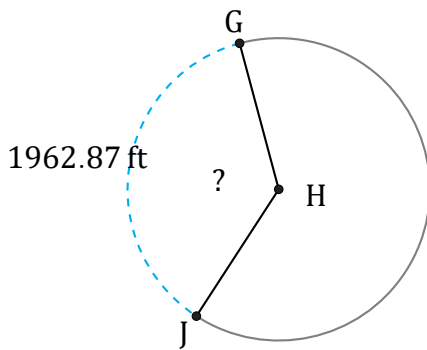
Radius = 7 km

$$\widehat{AC} = \frac{89}{360} \times \pi \times 7 \times 2 = 10.87 \text{ km}$$



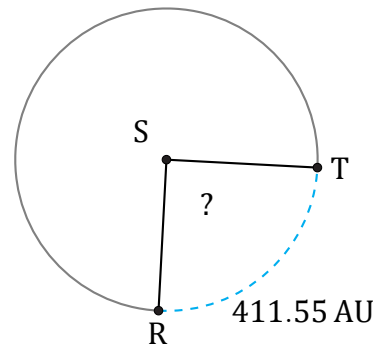
Diameter = 188 ft

$$\widehat{DF} = \frac{137}{360} \times \pi \times 188 = 224.76 \text{ ft}$$



Diameter = 1704 ft

$$\angle GHJ = \frac{1962.87}{1704 \times \pi} \times 360 = 132^\circ$$



Radius = 262 AU

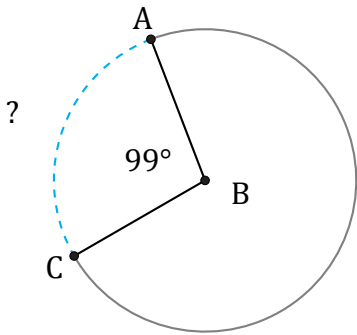
$$\angle RST = \frac{411.55}{262 \times \pi \times 2} \times 360 = 90^\circ$$

Arc Lengths and Angles (J)

Name: _____

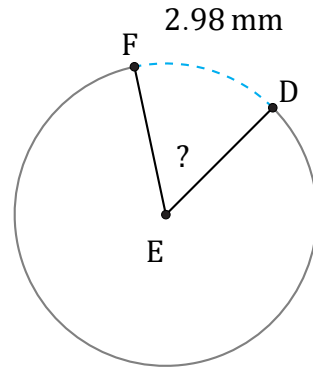
Date: _____

Calculate each arc length or angle measurement.



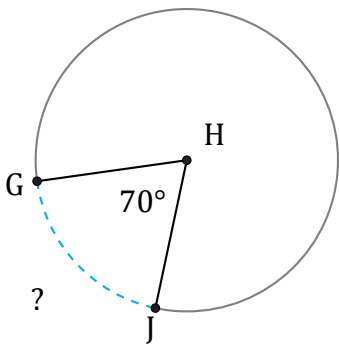
Diameter = 16 m

$\widehat{AC} =$



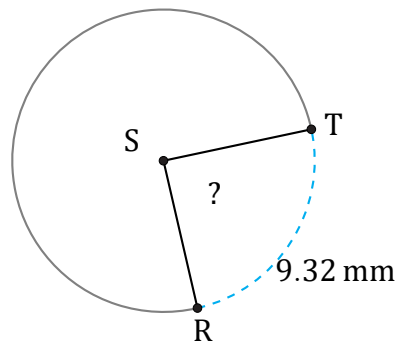
Diameter = 6 mm

$\angle DEF =$



Radius = 9 km

$\widehat{GJ} =$



Radius = 6 mm

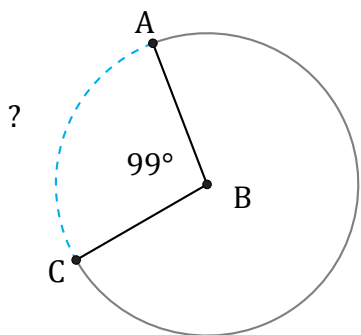
$\angle RST =$

Arc Lengths and Angles (J) Answers

Name: _____

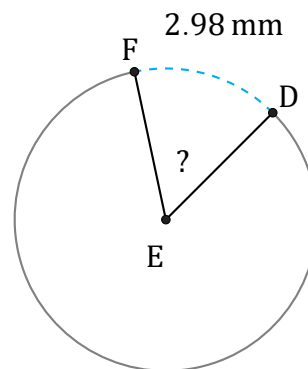
Date: _____

Calculate each arc length or angle measurement.



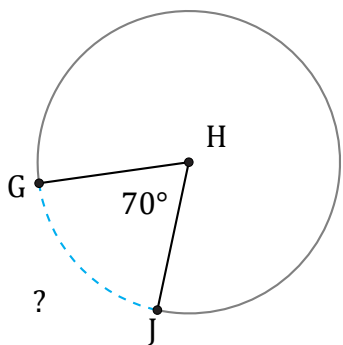
Diameter = 16 m

$$\widehat{AC} = \frac{99}{360} \times \pi \times 16 = 13.82 \text{ m}$$



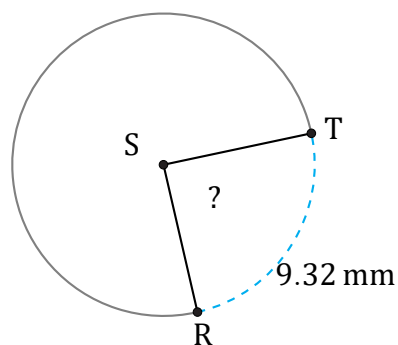
Diameter = 6 mm

$$\angle DEF = \frac{2.98}{6 \times \pi} \times 360 = 56.9^\circ$$



Radius = 9 km

$$\widehat{GJ} = \frac{70}{360} \times \pi \times 9 \times 2 = 11 \text{ km}$$



Radius = 6 mm

$$\angle RST = \frac{9.32}{6 \times \pi \times 2} \times 360 = 89^\circ$$