

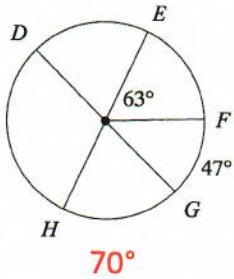
Name: _____

Arcs and Angles - Puzzle

Directions: Find the value of the arc, angle, or variable that is included. Shade in the box with the correct answer. There will be boxes remaining that are unshaded. Write the letters from those boxes in the order they appear in the spaces at the bottom of the page to reveal the answer to the following riddle

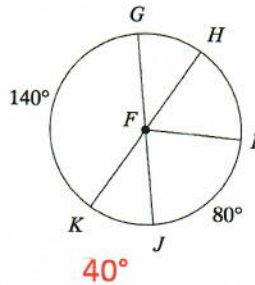
How do you count cows?

1) $m\widehat{DE}$



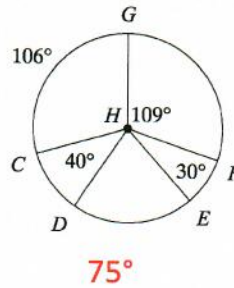
70°

2) $m\angle JFK$



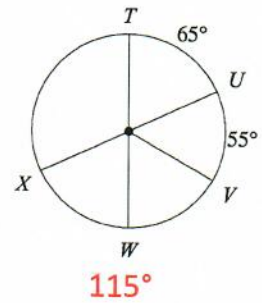
40°

3) $m\angle EHD$



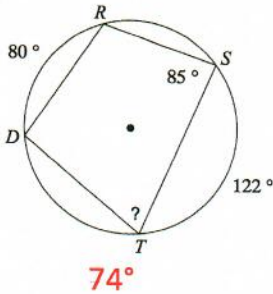
75°

4) $m\widehat{XT}$



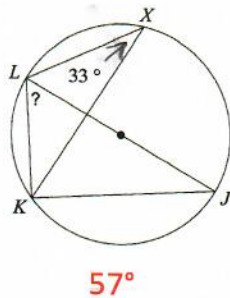
115°

5)



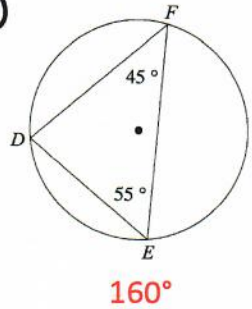
74°

6)



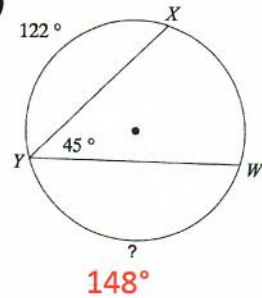
57°

7)



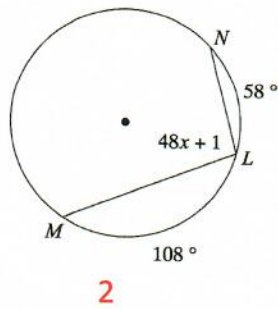
160°

8)



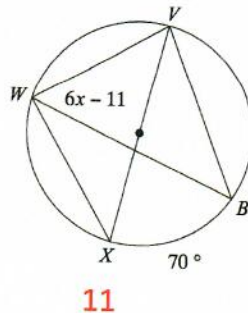
148°

9)



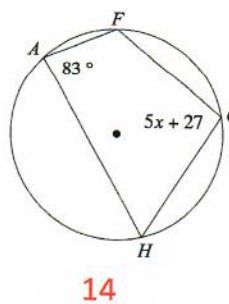
2

10)



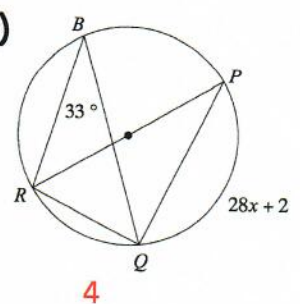
11

11)



14

12)



4

WIT 65	BIL 160	UN 148	DRE 14	HAC 8	PI 115
IPN 74	OWC 100	NOP 70	KHG 2	UL 133	NOP 4
AT 28	LIJ 75	ED 11	MYU 57	OR 3	OOS 40

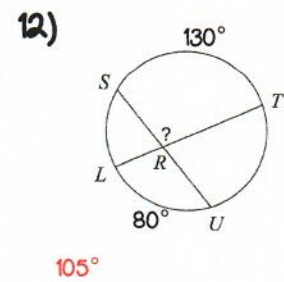
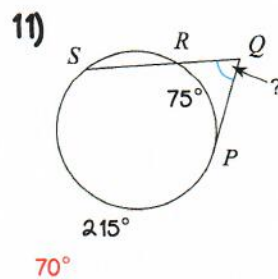
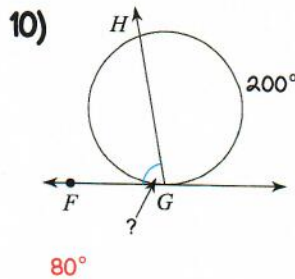
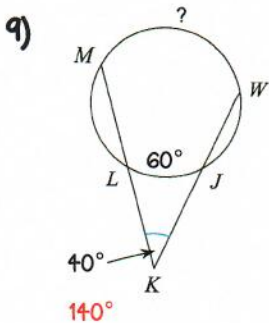
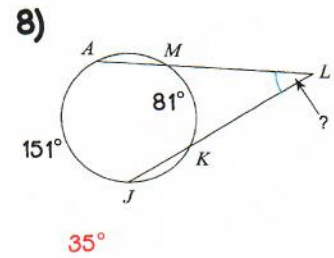
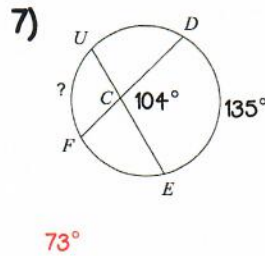
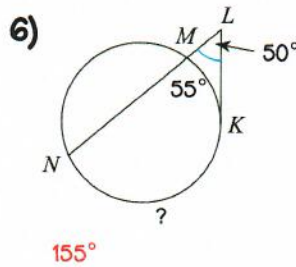
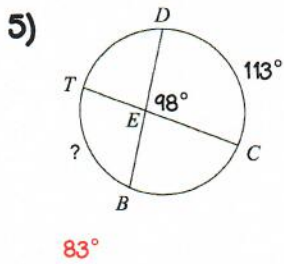
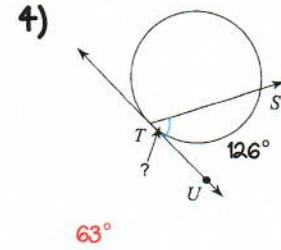
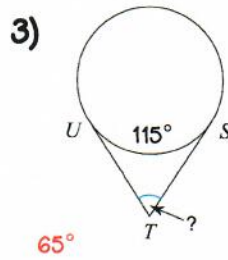
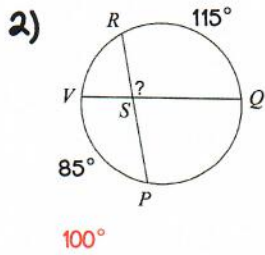
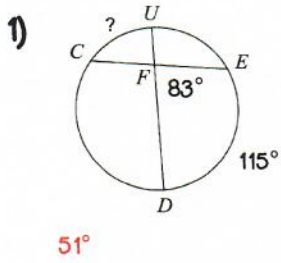
W I T H A C O W C U L A T O R

Name: _____

Secant/Tangent Angles - Puzzle

Directions: Find the answer to each problem in the boxes below. Shade in the box with the correct answer. There will be boxes remaining that are unshaded. Write the letters from those boxes in the order they appear in the spaces at the bottom of the page to reveal the answer to the following riddle

What do you get when a dinosaur sneezes?



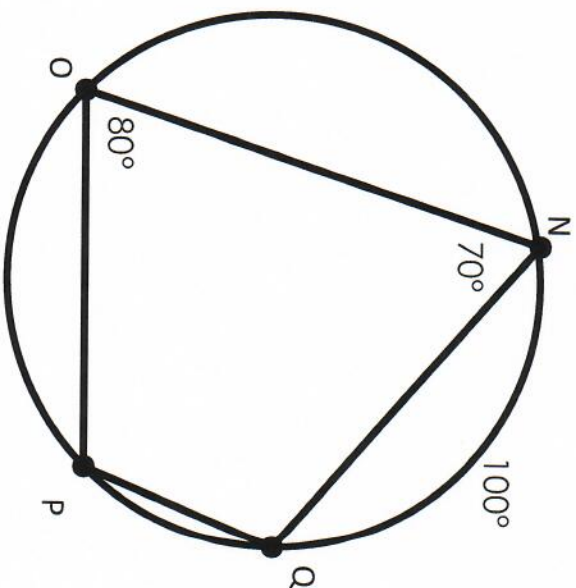
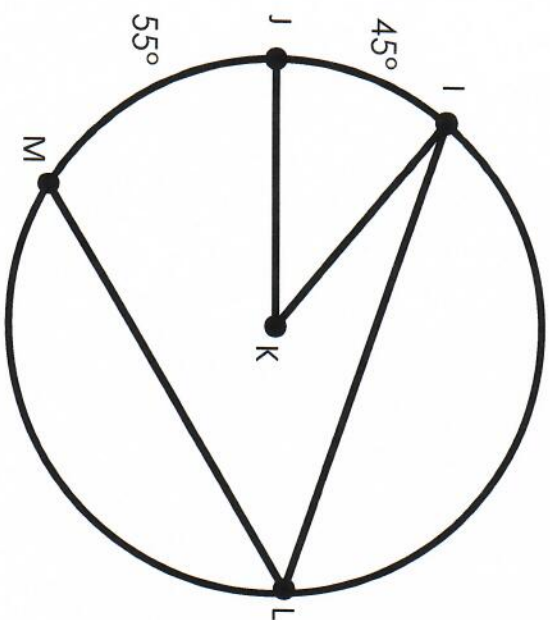
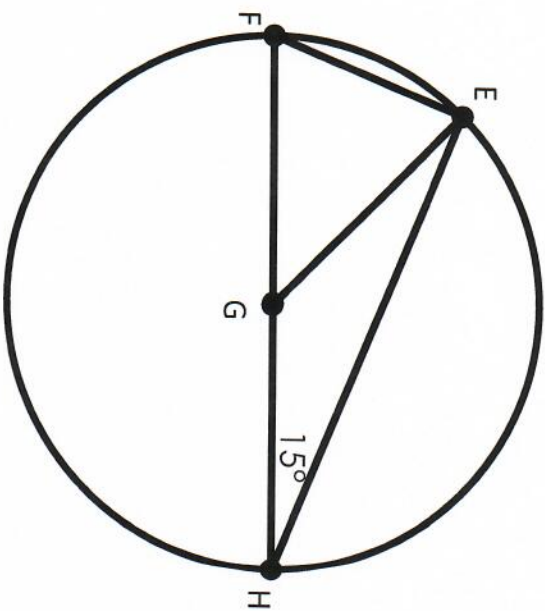
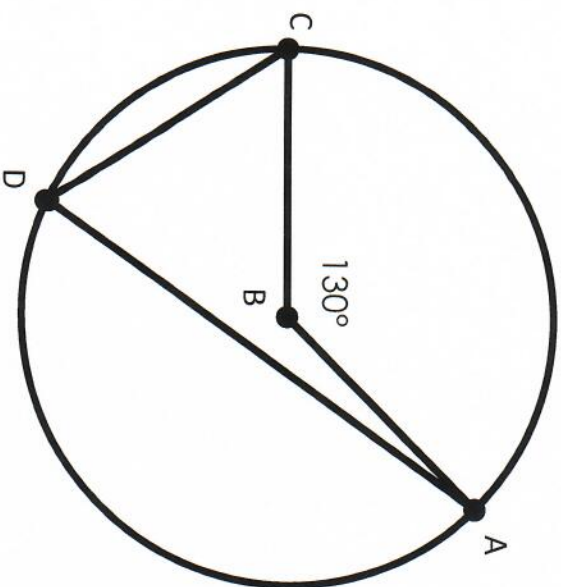
SH 63°	GE 110°	OM 100°	EL 65°	MU 35°	TO 68°	IC 83°
UT 75°	OF 99°	HE 51°	YD 140°	TH 103°	MO 155°	DA 105°
BA 73°	EW 59°	SD 80°	AY 43°	CE 140°	KT 70°	! 84°

G E T O U T O F T H E W A Y !

ANSWER KEY

CENTRAL & INSCRIBED ANGLES PRACTICE

Give the measure of each of the following without using a protractor. Drawings are not to scale.



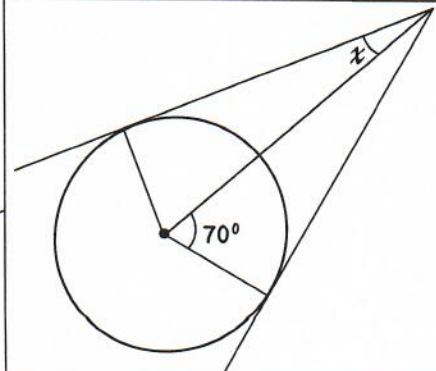
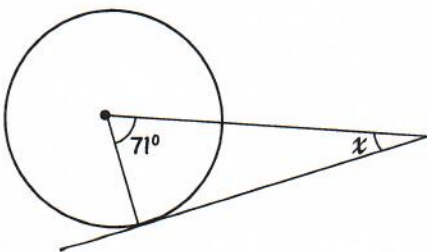
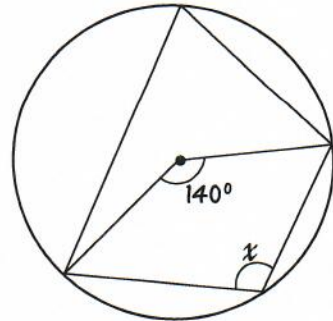
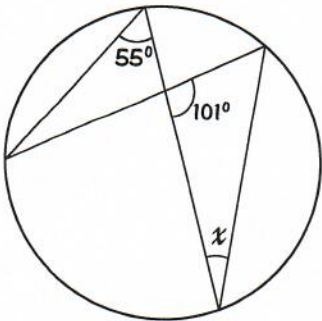
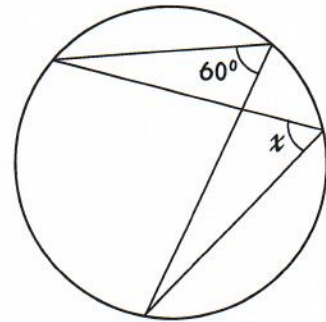
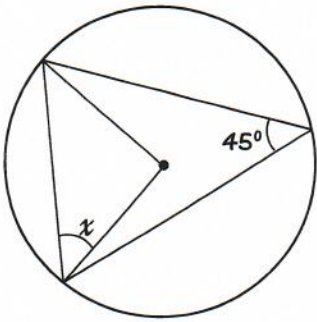
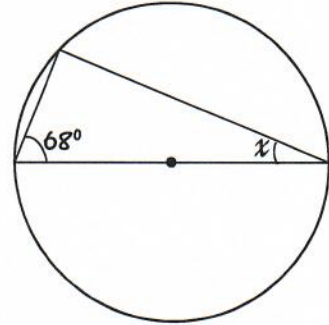
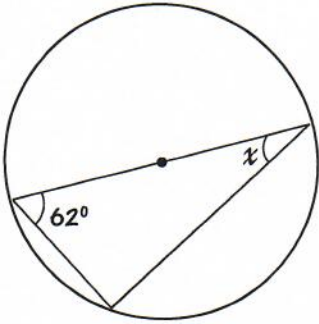
1. Arc AC: 130°
2. Angle CDA: 65°
3. Arc EF: 30°
4. Angle EGH: 150°
5. Angle EFG: 75°
6. Arc FEH: 180°
7. Angle IKJ: 45°
8. Angle ILM: 50°
9. Arc QP: 60°
10. Arc OP: 80°
11. Arc NO: 120°
12. Angle OPQ: 110°
13. Angle PQN: 100°

Circle Theorems - Mixed Questions.

Choose and use the correct circle theorem to solve each of the following problems.

Calculate the value of x and match to one of the answers in the middle.

Answers.



45°

22°

28°

110°

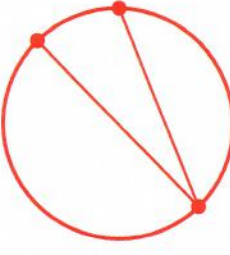

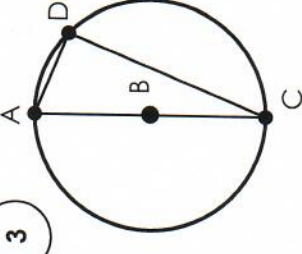
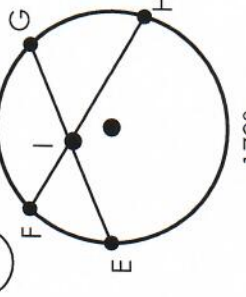
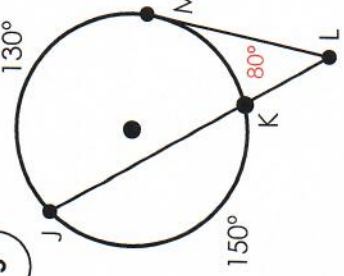
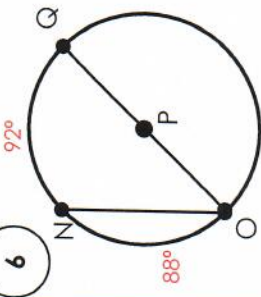
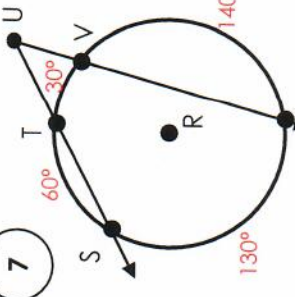
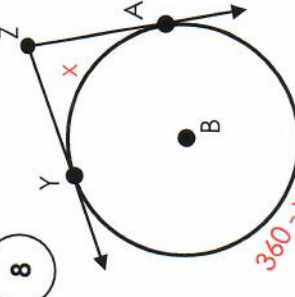
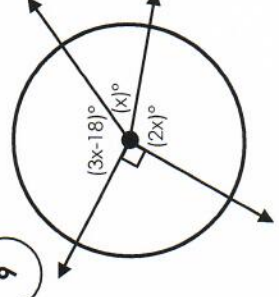
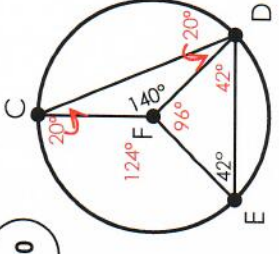
24°

60°

19°

20°

ARCS & ANGLES ANSWER KEY

<p>1</p> <p>What is an inscribed angle? Describe and draw an example.</p> <p>An inscribed angle is made of two chords within a circle that share one endpoint, which is the vertex.</p> 	<p>2</p> <p>What is a central angle? Describe and draw an example.</p> <p>A central angle is made of two segments that have an endpoint on the center of the circle and an endpoint on the circle. The vertex is located at the center of a circle.</p> 	<p>3</p>  <p>What is the measure of angle ADC? Explain how you know.</p> <p>90°</p> <p>The angle's endpoints are on a diameter, so it is a right angle.</p>	<p>4</p>  <p>What is the measure of angle FIG? Show your work.</p> <p>130°</p> <p>$(170 + 90) / 2 = 130$</p>	<p>5</p>  <p>What is the measure of angle KLM? Show your work.</p> <p>25°</p> <p>$360 - (150 + 130) = 80$ $(130 - 80) / 2 = 25$</p>
<p>6</p>  <p>Arc NO is 88°. What is the measure of angle NOQ? Show your work.</p> <p>46°</p> <p>$180 - 88 = 92$ $92 / 2 = 46$</p>	<p>7</p>  <p>Arc ST is 60°. Arc SV is 90°. Arc VW is 140°. What is the measure of Angle TUV? Show your work.</p> <p>50°</p> <p>$90 - 60 = 30$ (Arc TV) $360 - (60 + 30 + 140) = 130$ $(130 - 30) / 2 = 50$</p>	<p>8</p>  <p>Angle YZA is 80°. What is the measure of arc YA? Show your work.</p> <p>100°</p> <p>$80 = ((360 - x) - x) / 2$ $80 = (360 - 2x) / 2$ $80 = 180 - x$ $100 = x$</p>	<p>9</p>  <p>Find the value of x. Show your work.</p> <p>48°</p> <p>$(3x - 18) + x + 2x + 90 = 360$ $6x + 72 = 360$ $6x = 288$ $x = 48$</p>	<p>10</p>  <p>What is the measure of arc CE? Show your work.</p> <p>124°</p> <p>$180 - (42 + 42) = 96$ $360 - (96 + 140) = 124$ or $(180 - 140) / 2 = 20$ $2(20 + 42) = 124$</p>