Sully

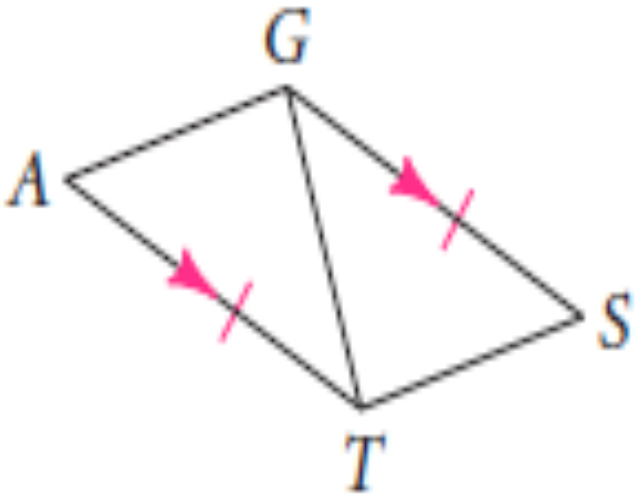
Presents

Jeopardy

Congruent Triangles	Quadrilaterals	Circles	Parallel and Perpendicular Lines	Similarity
$100	$100	$100	$100	$100
$200	$200	$200	$200	$200
$300	$300	$300	$300	$300
$400	$400	$400	$400	$400
$500	$500	$500	$500	$500

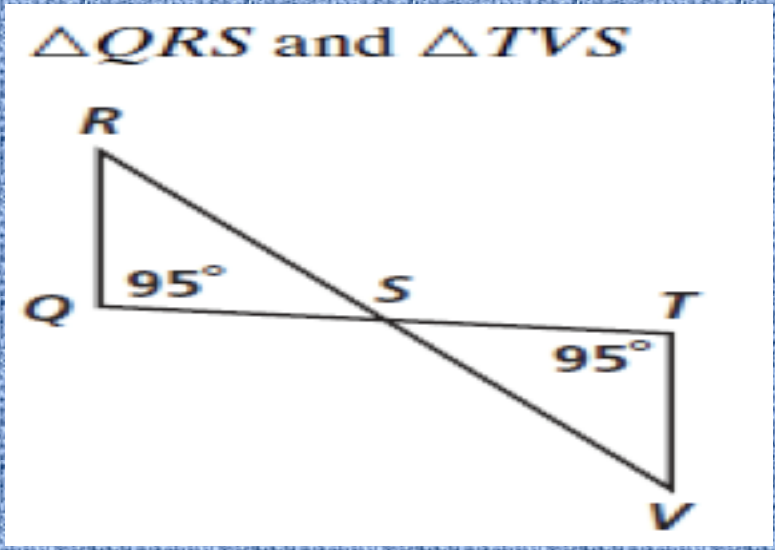
Given: $\overline{AT} \cong \overline{GS}$, $\overline{AT} \parallel \overline{GS}$

Prove: $\triangle GAT \cong \triangle TSG$



Click Anywhere to Continue

State whether the pair of figures are congruent. Explain



Click Anywhere to Continue

$\triangle LMN \cong \triangle HIJ$. Which of the following are *not* necessarily true?

I. $\angle L \cong \angle H$

II. $\overline{LM} \cong \overline{IJ}$

III. $\angle N \cong \angle I$

IV. $\overline{LN} \cong \overline{HJ}$

A I and II

B II and III

C III and IV

D I and IV

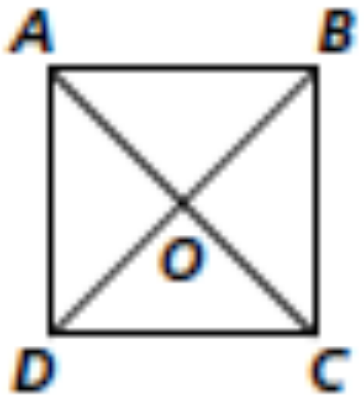
E none of the above

Click Anywhere to Continue

Write a two column proof.

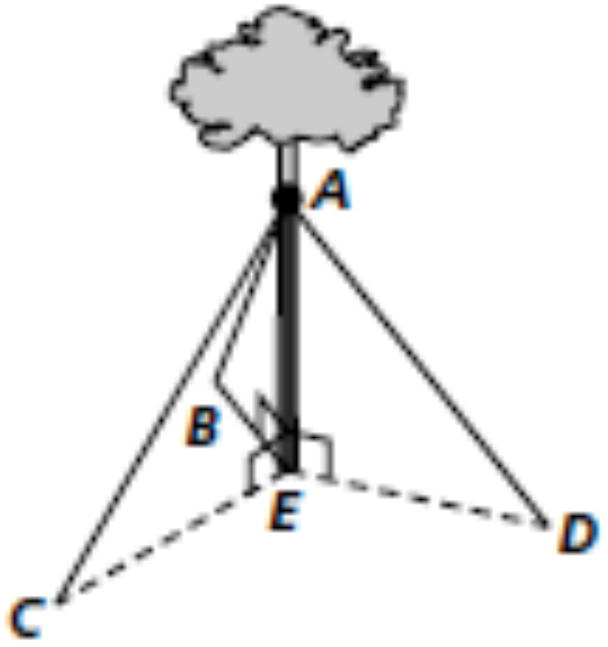
Given: O is the midpoint of $\overline{AC}$ and of $\overline{BD}$.

Prove: $\triangle AOD \cong \triangle COB$



Click Anywhere to Continue

The tree at the right is perpendicular to the ground containing points B, C, D, and E. The support wires running from the tree to points B, C, and D are the same length. Is this enough information to conclude that $\triangle AEB$, $\triangle AEC$, and $\triangle AED$ are congruent? Explain.



Click Anywhere to Continue

What is the most precise name for a quadrilateral with vertices $(2, -1), (6, 3), (-2, 3)$, and $(2, 9)$?

A rectangle

B parallelogram

C kite

D rhombus

E none of the above

Click Anywhere to Continue

Which is sufficient to prove that a quadrilateral is a rhombus?

A The diagonals bisect each other.

B The diagonals are perpendicular.

C All four sides are congruent.

D A pair of opposite sides are congruent and parallel.

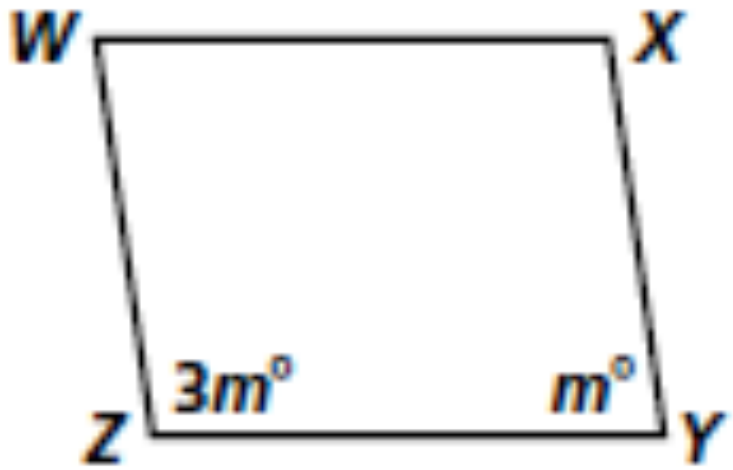
E none of the above

Click Anywhere to Continue

Find the value of m in parallelogram $WXYZ$.

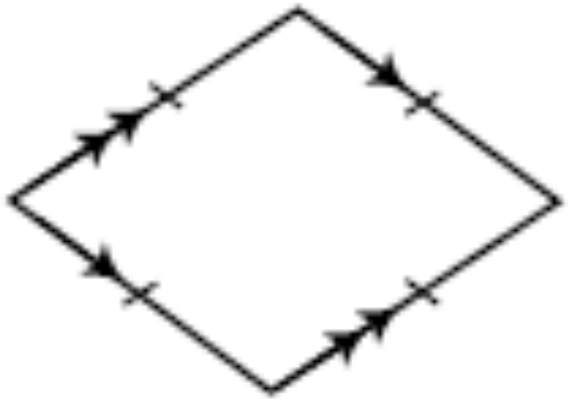
A 40 B 45

C 90 D 135



Click Anywhere to Continue

What is a name for the quadrilateral below?



I. rectangle
II. square
III. rhombus
IV. parallelogram

A I and II
B I, III, and IV
C III and IV
D IV only
E none of the above

Click Anywhere to Continue

In quadrilateral $BCDE$, $\angle B$ is congruent to $\angle E$. How could $BCDE$ *not* be classified?

A square **B** trapezoid

C kite **D** rectangle

E none of the above

Click Anywhere to Continue

A circle has radius 12 cm. The central angle of a sector measures 150. What is the area of the sector?

A $60\pi \text{ cm}^2$

B $10\pi \text{ cm}^2$

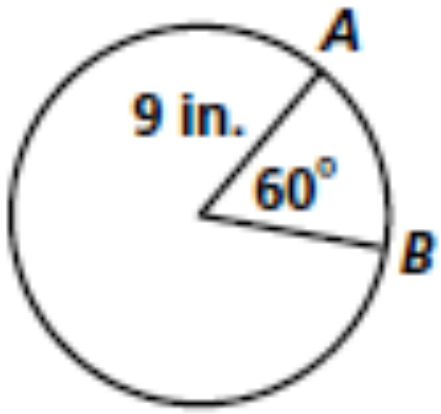
C $144\pi \text{ cm}^2$

D $67.5\pi \text{ cm}^2$

E none of the above

Click Anywhere to Continue

Jamal and Grace are going to divide a slice of pizza evenly. The measure of the pizza slice's arc is 60 and the radius of the pizza is 9 in. Find the arc length of Grace's slice.



A 1.5π in.

B 3π in.

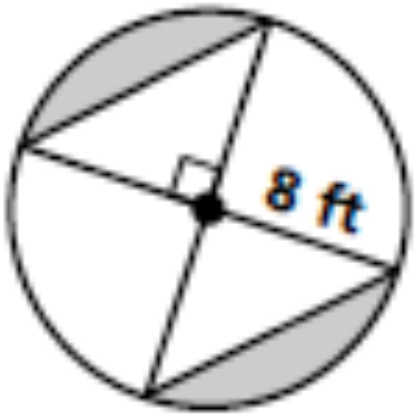
C 6π in.

D 9π in.

E none of the above

Click Anywhere to Continue

Find the area of the shaded region.



A $(32 - 16\pi)$ cm

B $(16\pi - 32)$ cm

C $(64 - 32\pi)$ cm

D $(32\pi - 64)$ cm

E none of the above

Click Anywhere to Continue

Which of the following can be the length of the sides of a 45°-45°-90° triangle?

I. $\frac{1}{2}, 1, \frac{\sqrt{3}}{2}$

II. $2, 2, 2\sqrt{2}$

III. $3, 3, 3\sqrt{3}$

A I only B II only C III only

D II and III

E none of the above

Click Anywhere to Continue

Find the area of rhombus *LMNO*.

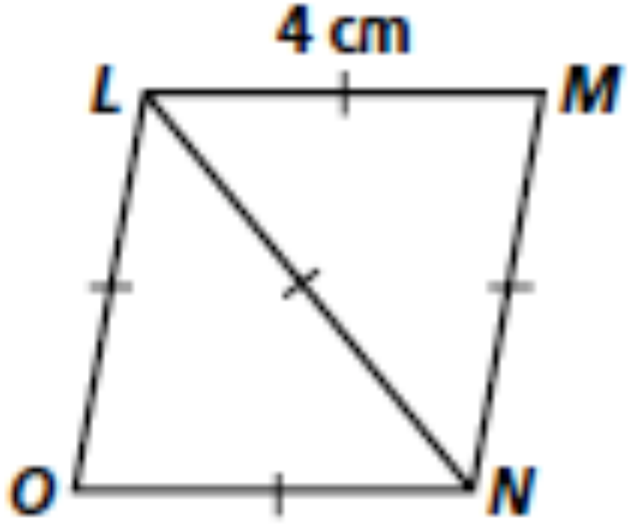
A $16\ \text{cm}^2$

B $8\sqrt{3}\ \text{cm}^2$

C $8\ \text{cm}^2$

D $4\sqrt{3}\ \text{cm}^2$

E none of the above



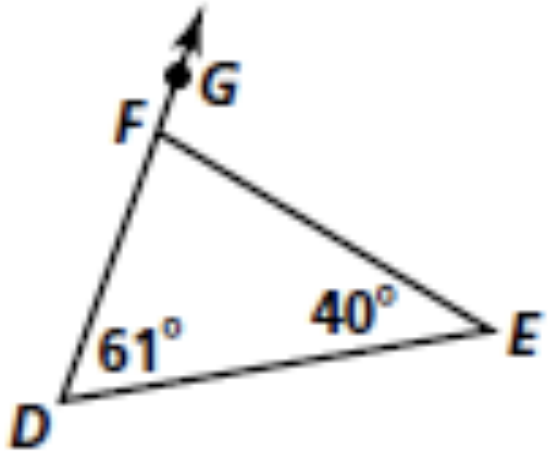
Click Anywhere to Continue

What is $m\angle EFG$?

A 69 B 79

C 100 D 101

E none of the above



Click Anywhere to Continue

Find the measure of one of the interior angles of the regular polygon shown.

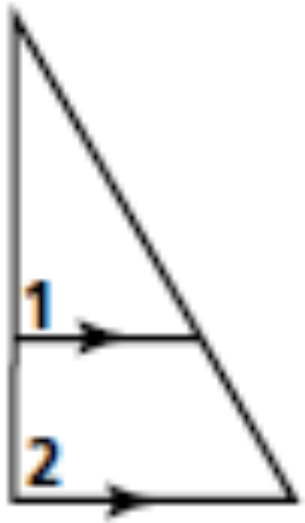
A 60 B 120

C 135 D 145

E none of the above

Click Anywhere to Continue

How should $\angle 1$ and $\angle 2$ be classified?



A alternate interior angles

B corresponding angles

C same-side interior angles

D vertical angles

E none of the above

Click Anywhere to Continue

Which of these lines is perpendicular to the line $y = 2x + 6$?

A $2y = -4x + 3$

B $2y = 4x + 3$

C $2y = x + 3$

D $-2y = x + 3$

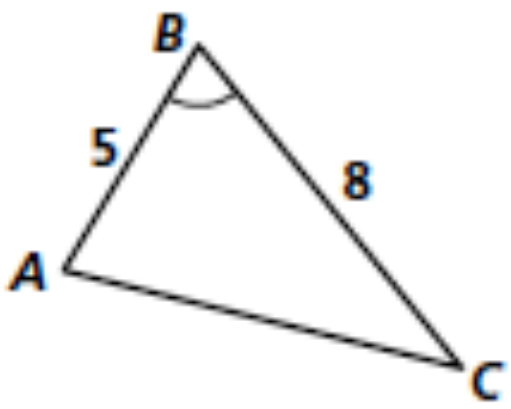
E none of the above

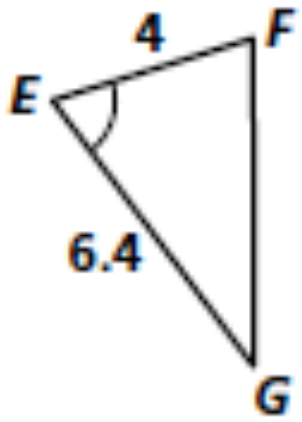
Click Anywhere to Continue

Writing Describe three pairs of angles that can be used to determine whether two lines are parallel. Include a diagram.

Click Anywhere to Continue

How can you prove $\triangle ABC \sim \triangle FEG$?





A AA ~ Postulate

B SSS ~ Theorem

C SAS ~ Theorem

D ASA ~ Theorem

E none of the above

Click Anywhere to Continue

$\triangle XYZ \sim \triangle RST$. What can you conclude?

A $XY = RS$

B $m\angle X = m\angle Y$

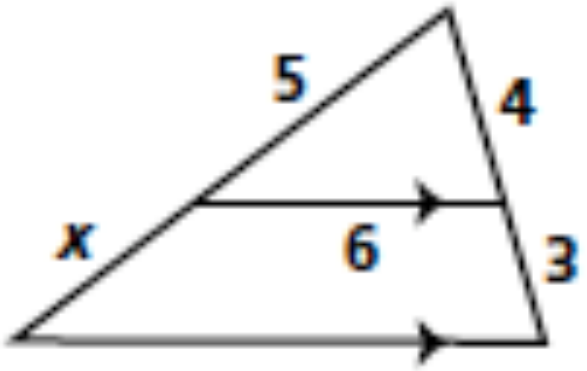
C $m\angle S = m\angle Y$

D $\triangle XYZ \cong \triangle RST$

E none of the above

Click Anywhere to Continue

Find the value of x.



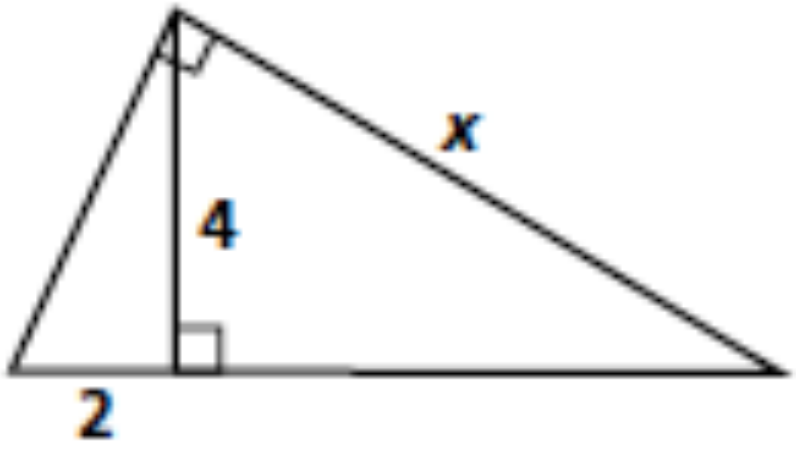
A $\frac{15}{4}$ B $\frac{12}{5}$

C $\frac{20}{3}$ D 2

E none of the above

Click Anywhere to Continue

Find the value of x.



A 8 B $2\sqrt{5}$

C $4\sqrt{5}$ D $16\sqrt{5}$

E none of the above

Click Anywhere to Continue

A tree casts a shadow 40 ft long. A man who is 6 ft tall stands nearby and casts a shadow 9 ft long. Find the height of the tree.

Click Anywhere to Continue