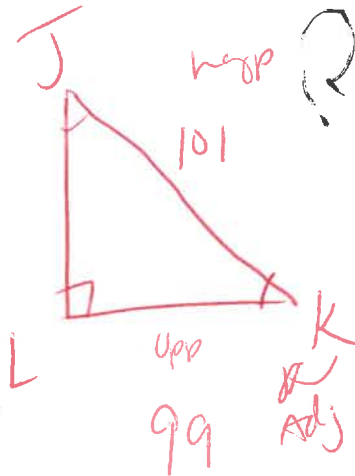


1. Two statements about triangle JKL are shown.

- $m \angle L = 90^\circ$
- $\sin(J) = \frac{99}{101}$ *opp hyp*

Which ratio represents $\cos(K)$?

- Ⓐ $\frac{101}{99}$
- Ⓑ $\frac{99}{101}$
- Ⓒ $\frac{20}{101}$
- Ⓓ $\frac{20}{99}$



$$\cos = \frac{\text{Adj } 99}{\text{hyp } 101}$$

Geometry EOC

2. Line segment MN has endpoints $M(-7, 10)$ and $N(-1, 1)$. Point P is on line segment MN such that the ratio $MP:PN$ is 2:1.

What is the x -coordinate of point P ?

$\frac{-2-7}{3} = \frac{-9}{3}$

-3		
←	→	↶
1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

3. Which statement is true when a three-dimensional figure is dilated by a given scale factor?

- (A) A dilation by a scale factor of $\frac{2}{3}$ results in an increase in volume. *smaller*
- (B) A dilation by a scale factor of 0.1 results in no change in volume. *no*
- (C) A dilation by a scale factor of $\frac{3}{2}$ results in a decrease in surface area. *smaller 1.5x*
- (D) A dilation by a scale factor of 3.5 results in an increase in surface area. *yes!!*



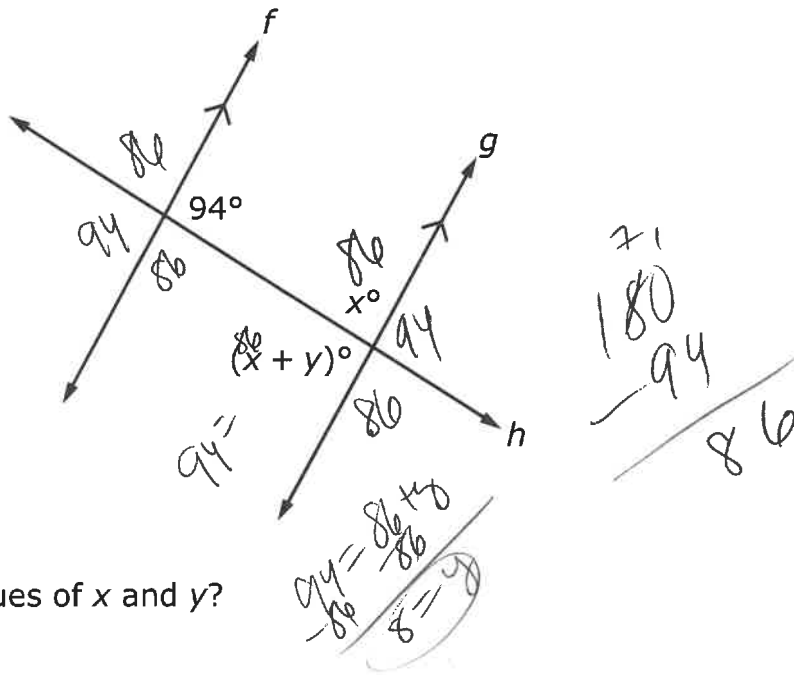
$$3.5^3 = 42.875$$

times larger
both volume & surface area 3.5

$$\frac{257.25}{6} = 42.875$$

Geometry EOC

4. Two parallel lines, f and g , are cut by a transversal, h , as shown.



What are the values of x and y ?

$x =$

86

←
→
↶
↷
✖

1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

y =

8				
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

$$\begin{array}{r}
 86 + y = 94 \\
 - 86 \quad \quad - 86 \\
 \hline
 y = 8
 \end{array}$$

Geometry EOC

5. Which statement must be true for all parallelograms?

- (A) Diagonals are congruent.
- (B) Diagonals are perpendicular.
- (C) Opposite angles are complementary.
- (D) Consecutive angles are supplementary.

6. A true statement is given.

"If two given shapes are circles, then the shapes are similar."

Select the boxes to identify what could be the converse, inverse, and contrapositive of the given statement.

P → Q

	<i>P → Q</i> Converse <i>switch</i>	<i>not P → not Q</i> Inverse <i>not</i>	<i>not Q → not P</i> Contrapositive <i>switch</i>
If two given shapes are not similar, then the shapes are not circles.	(A)	(B)	<input checked="" type="checkbox"/>
If two given shapes are similar, then the shapes are circles.	<input checked="" type="checkbox"/>	(E)	(F)
If two given shapes are not circles, then the shapes are not similar.	(G)	<input checked="" type="checkbox"/>	(I)

Geometry EOC

7. This question has **two** parts.

The vertices of two triangles are given.

- The coordinates of the vertices of the first triangle are $Q (2, 0)$, $R (6, 0)$, and $S (2, 4)$.
- The coordinates of the vertices of the second triangle are $T (8, 0)$, $U (4, -4)$, and $V (4, 0)$.

Part A

Which statement describes a relationship between the first and second triangles?

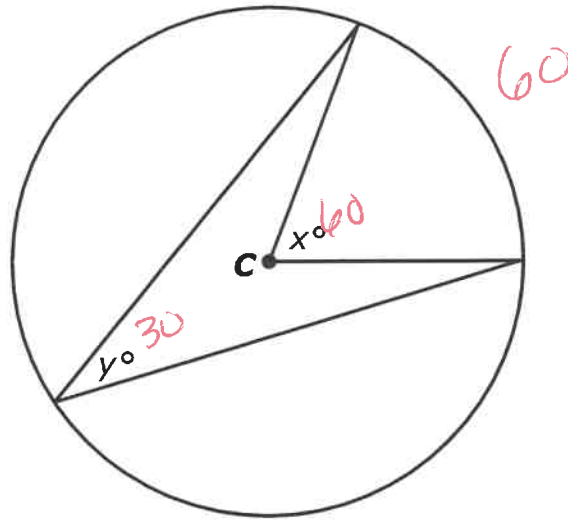
- Ⓐ $\triangle QRS \cong \triangle TUV$
- Ⓑ $\triangle QRS \cong \triangle VTU$
- Ⓒ $\triangle QRS \sim \triangle TUV$
- Ⓓ $\triangle QRS \sim \triangle UVT$

Part B

Select expressions to create a transformation that proves the statement in Part A.

$$(x, y) \rightarrow ([\text{Ⓐ } 2x \text{ Ⓑ } -x \text{ Ⓒ } x + 2 \text{ Ⓓ } x - 2], [\text{Ⓐ } 2y \text{ Ⓑ } -y \text{ Ⓒ } y + 8 \text{ Ⓓ } y - 8])$$

8. An inscribed angle and a central angle are shown in circle C.



$$x = 2y$$

$$\text{or } y = \frac{1}{2}x$$

Create an equation to show the relationship between x and y .

$$x = 2y \text{ or } y = \frac{1}{2}x$$

			<input type="button" value="←"/> <input type="button" value="→"/> <input type="button" value="↶"/> <input type="button" value="↷"/> <input type="button" value="✖"/>							
<input type="button" value="1"/>	<input type="button" value="2"/>	<input type="button" value="3"/>	<input type="button" value="x"/>	<input type="button" value="y"/>						
<input type="button" value="4"/>	<input type="button" value="5"/>	<input type="button" value="6"/>	<input type="button" value="+"/>	<input type="button" value="-"/>	<input type="button" value="•"/>	<input type="button" value="÷"/>				
<input type="button" value="7"/>	<input type="button" value="8"/>	<input type="button" value="9"/>	<input type="button" value("<"=""/>	<input type="button" value="≤"/>	<input "="" type="button" value="="/>	<input type="button" value="≥"/>	<input type="button" value=">"/>			
<input type="button" value="0"/>	<input type="button" value="0"/>	<input type="button" value="0"/>	<input type="button" value="□<sup>□</sup>"/>	<input type="button" value="□<sub>□</sub>"/>	<input type="button" value("(")"=""/>	<input type="button" value=" "/>	<input type="button" value="√□"/>	<input type="button" value="∛□"/>	<input type="button" value="π"/>	<input type="button" value="i"/>
<input type="button" value="."/>	<input type="button" value="-"/>	<input type="button" value="□/□"/>	<input type="button" value="sin"/>	<input type="button" value="cos"/>	<input type="button" value="tan"/>	<input type="button" value="arcsin"/>	<input type="button" value="arccos"/>	<input type="button" value="arctan"/>		

Geometry EOC

9. Figure A is drawn on a coordinate plane. Transformations are performed on figure A to create figure B.

Select the boxes to identify whether each transformation performed on figure A results in a congruent or noncongruent figure B.

	Congruent	Noncongruent
$(x, y) \rightarrow (y, -x)$ <i>rot 270</i>	<input checked="" type="radio"/> A	<input type="radio"/> B
$(x, y) \rightarrow \left(\frac{1}{2}x, \frac{1}{2}y\right)$ <i>scale 1/2</i>	<input type="radio"/> C	<input checked="" type="radio"/> D
a reflection across the line $y = -x$	<input checked="" type="radio"/> E	<input type="radio"/> F
a 50-degree clockwise rotation about the origin	<input checked="" type="radio"/> G	<input type="radio"/> H

10. A line segment has an endpoint at (1, 1) and a midpoint at (1, -3).

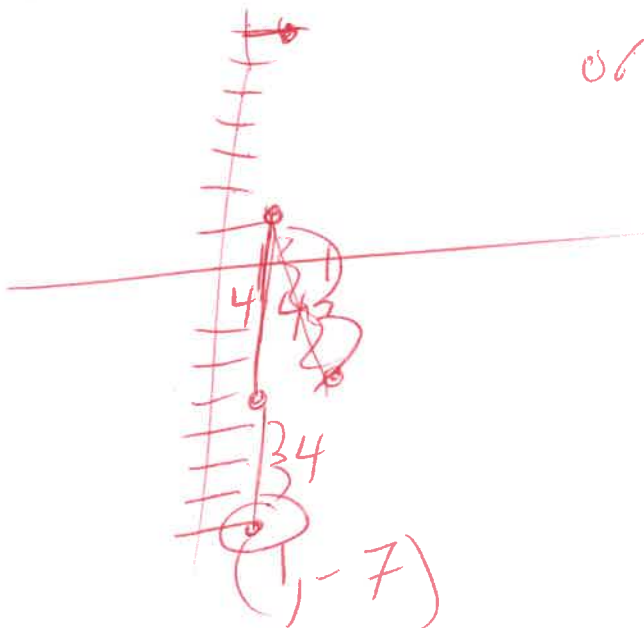
What are the coordinates of the other endpoint?

- Ⓐ (1, 5)
- Ⓑ (1, -1)
- Ⓒ (1, -5)
- Ⓓ (1, -7)

$$2\left(\frac{1+x}{2} = 1\right)^2 \quad 2\left(\frac{1+y}{2} = -3\right)^2$$

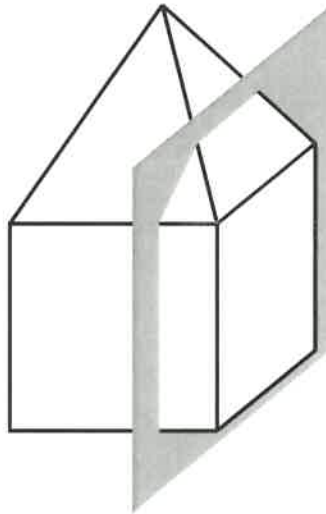
$$\begin{array}{r} 1+x = 2 \\ -1 \quad -1 \\ \hline x = 1 \end{array} \quad \begin{array}{r} 1+y = -6 \\ -1 \quad -1 \\ \hline y = -7 \end{array}$$

or graph: use slope!



Geometry EOC

11. The figure consisting of a right pyramid and a right rectangular prism is sliced perpendicular to its base, as shown.



What is the shape of the resulting cross section?

- A a rectangle
- B a trapezoid
- C a composite shape made up of a rectangle and a triangle
- D a composite shape made up of a rectangle and a trapezoid

12. A triangle has vertices at $T(2, 5)$, $U(6, 6)$, and $V(4, -3)$.

Complete the statements to explain why triangle TUV is a right triangle.

The slope of \overline{TU} is

$\frac{1}{4}$

← → ↶ ↷ ✖		
1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

and the slope of \overline{TV} is

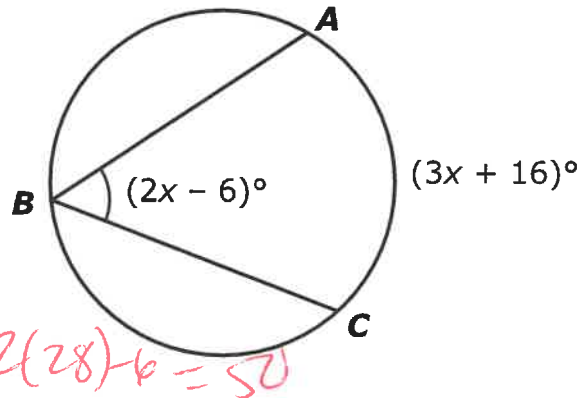
-4

← → ↶ ↷ ✖		
1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

Triangle TUV is a right triangle because \overline{TU} and \overline{TV} are
 [Ⓐ skewed Ⓑ parallel Ⓒ perpendicular] and therefore form a right angle.

Geometry EOC

13. Points A, B, and C lie on the circle, as shown.



- The measure of $\angle ABC$ is $(2x - 6)^\circ$.
- The measure of \widehat{AC} is $(3x + 16)^\circ$.

What is the measure, in degrees, of $\angle ABC$?

50

← → ↶ ↷ ⌫

1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

$$2x - 6 = \frac{1}{2}(3x + 16)$$

$$2x - 6 = 1.5x + 8$$

$$\begin{array}{r} -1.5x \quad -1.5x \\ \hline \end{array}$$

$$0.5x - 6 = 8$$

$$\begin{array}{r} +6 \quad +6 \\ \hline \end{array}$$

$$\frac{0.5x}{0.5} = \frac{14}{0.5}$$

$$x = 28$$

14. A cone has a radius of 3 units, a height of 4 units, and a slant height of 5 units.

Which expression represents the surface area, in square units, of the cone?

- (A) 15π
- (B) 21π
- (C) 24π
- (D) 29π



$$SA: B + \pi r l \rightarrow \begin{matrix} \text{slant height} \\ \downarrow \\ \text{radius} \end{matrix}$$

\downarrow
 area
 of
 Base

$$\pi r^2$$

$$\pi(3)^2 + \pi(3)(5)$$

$$9\pi + 15\pi$$

$$24\pi$$

Geometry EOC

15. Rectangle $ABCD$ has the given side lengths.

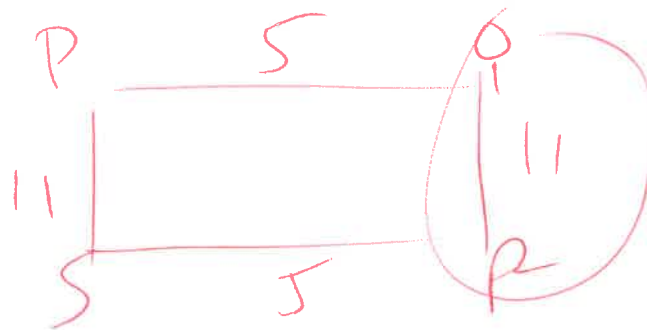
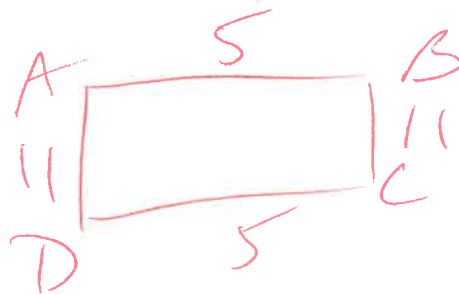
- $AB = 5$ units
- $BC = 11$ units

Rectangle $PQRS$ is congruent to rectangle $ABCD$.

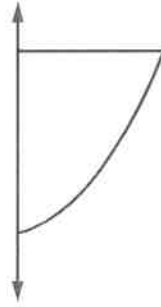
What is the length of \overline{QR} , in units?

← → ↶ ↷ ✖

1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

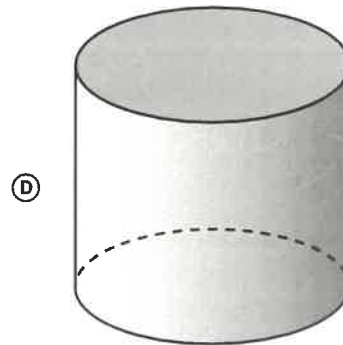
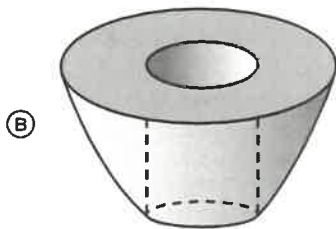
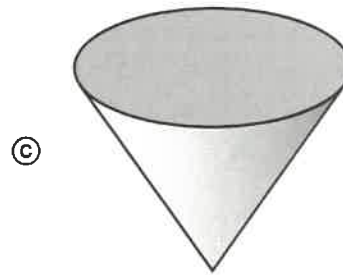
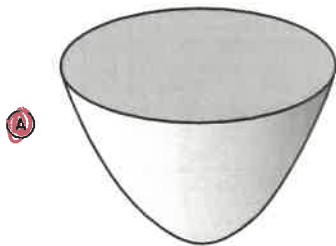


16. A two-dimensional figure and a vertical line are shown.



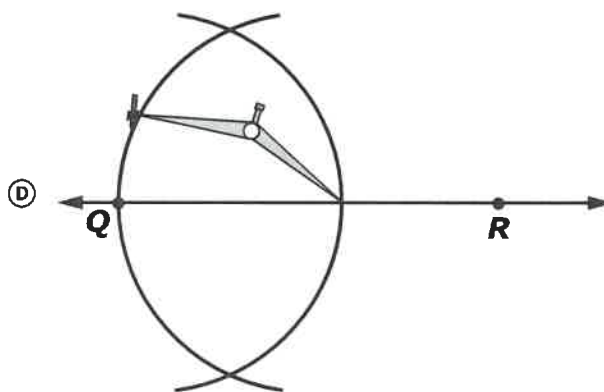
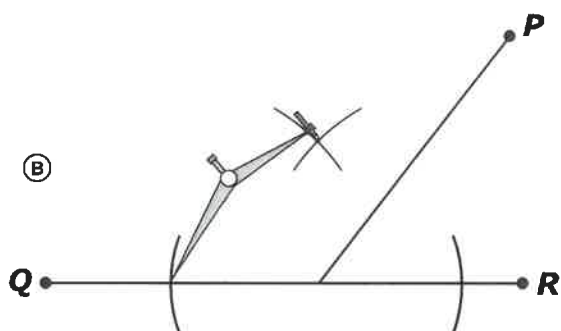
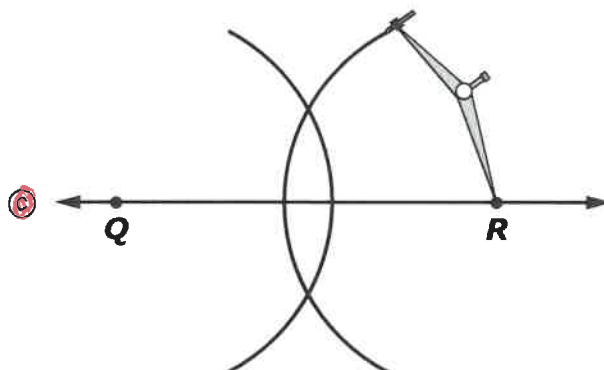
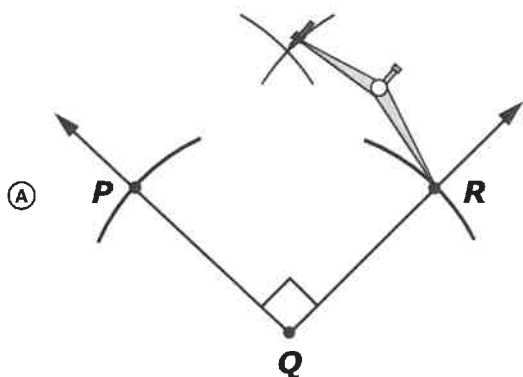
The figure is rotated about the vertical line.

Which object could be the result of this rotation?

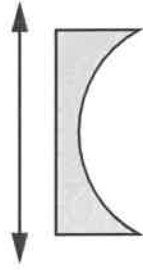


Geometry EOC

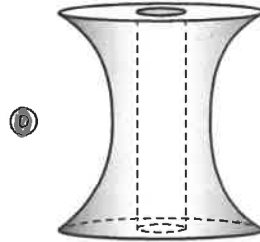
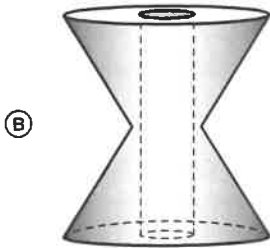
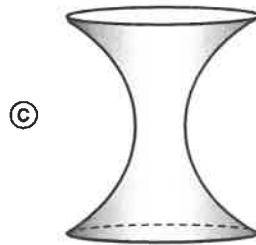
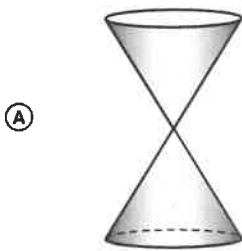
17. Which figure shows steps leading to the construction of a perpendicular bisector?



18. A figure and a vertical line are shown.



Which object is generated by rotating the figure around the vertical line?



Geometry EOC

19. Triangle M has a base length of 18 inches and a height of 12 inches. Triangle N is congruent to triangle M .

What is the area, in square inches, of triangle N ?

108				
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

$$\frac{18 \cdot 12}{2} = (108)$$

$$\frac{bh}{2}$$

20. The equation of a circle is given.

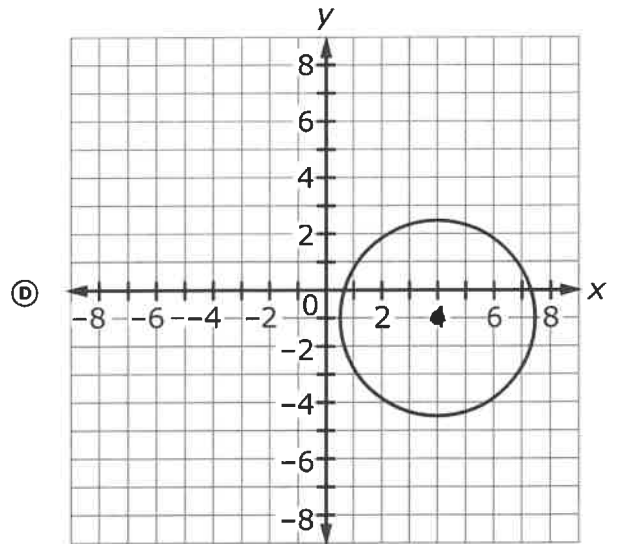
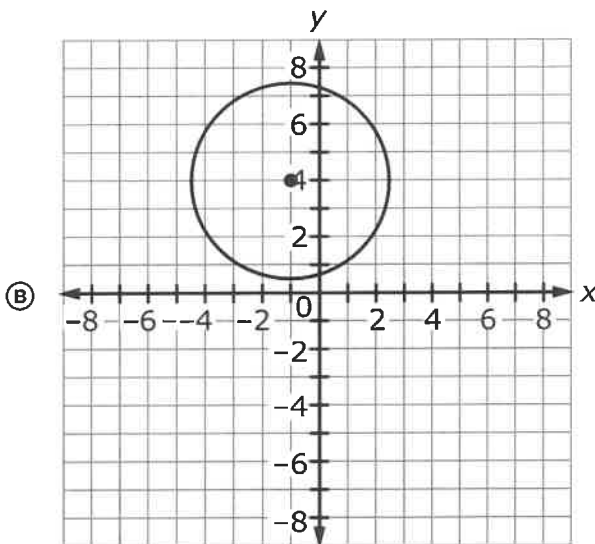
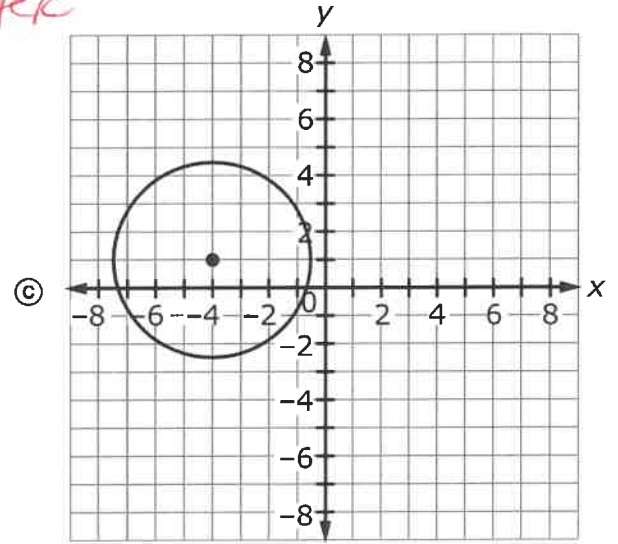
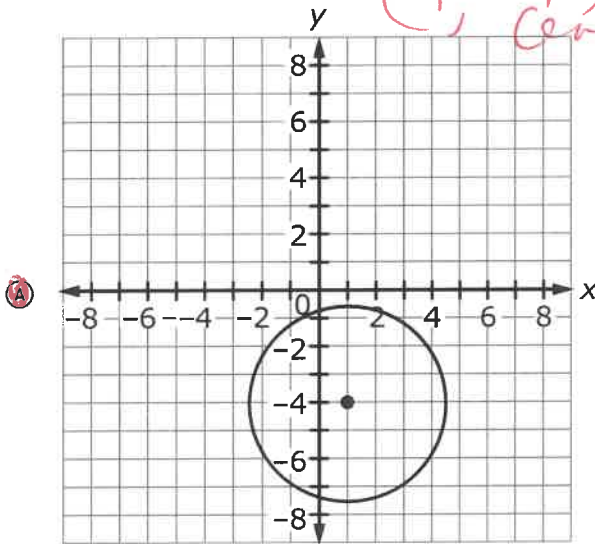
$$(x-h)^2 + (y-k)^2 = r^2$$

$$(x-1)^2 + (y+4)^2 = 12.25$$

Which graph represents the equation?

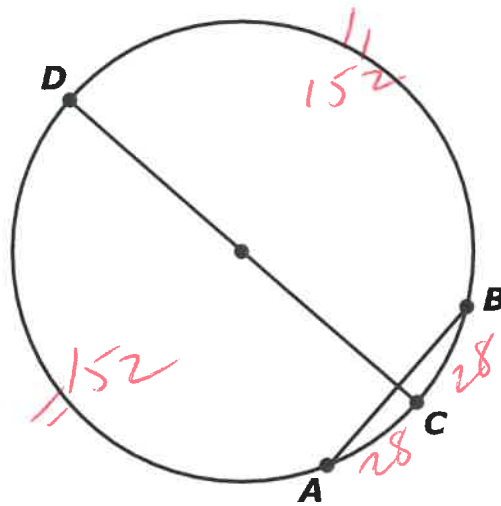
$$r = \sqrt{12.25} = 3.5$$

(1, -4) center



Geometry EOC

21. A circle with chord AB and its perpendicular bisector CD is shown.



The measure of \widehat{AC} is 28° .

What is the measure, in degrees, of \widehat{BD} ?

$$28 + 28 = 56$$

$$\begin{array}{r} 360 \\ - 56 \\ \hline 304 \end{array}$$

$$\frac{304}{2} = 152$$

152

←
→
↶
↷
✖

1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

22. Triangle XYZ is transformed to create triangle X' Y' Z' using the rule $(x, y) \rightarrow (x + b, y + c)$.

- Triangle XYZ has the vertices $(3, -2)$, $(3, -4)$, and $(0, -4)$, respectively.
- Triangle X' Y' Z' has the vertices $(-1, 5)$, $(-1, 3)$, and $(-4, 3)$, respectively.

-4 + 7 -4 + 7 -4 + 7

What are the values of b and c ?

or graph to prove!

$b =$

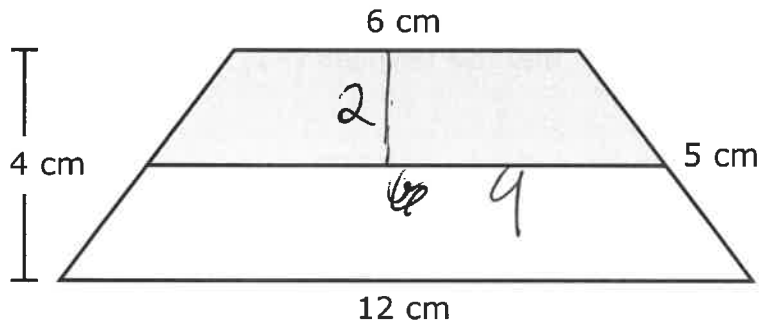
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

$c =$

←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

Geometry EOC

23. A tile is in the shape of an isosceles trapezoid. The tile is divided into 2 parts by its midsegment. The trapezoid, with lengths in centimeters (cm), is shown.



The top part is shaded.

What is the area, in square centimeters, of the shaded part?

- (A) 12
- (B) 15
- (C) 18
- (D) 36

$$\frac{6+12}{2}$$

$$\frac{18}{2} = 9$$

$$\frac{1}{2}(h)(b_1 + b_2)$$

$$\frac{1}{2}(2)(6 + 9)$$

$$\frac{1}{2}(2)(15)$$

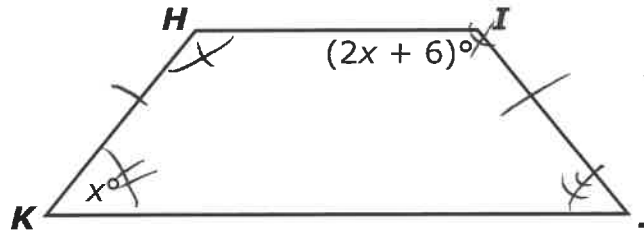
$$2(15)$$

$$30/2 = 18$$

$$1(15)$$

$$15$$

24. An isosceles trapezoid is shown.



$$2x + 6 + x = 180$$

$$3x + 6 = 180$$

$$3x = 174$$

$$x = 58$$

What is the measure of $\angle HIJ$, in degrees?

122		
←	→	↶
↷	✖	
1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

$$2(58) + 6 = 122$$

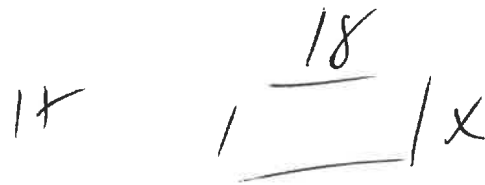
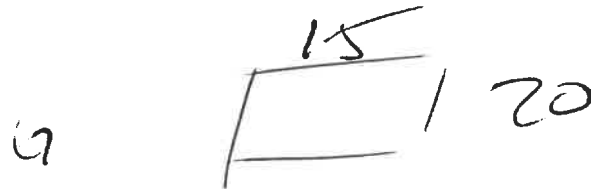
Geometry EOC

25. Rectangle G has a length of 15 inches and a width of 20 inches. Rectangle H is similar to rectangle G and has a length of 18 feet.

What is the width, in feet, of rectangle H ?

24

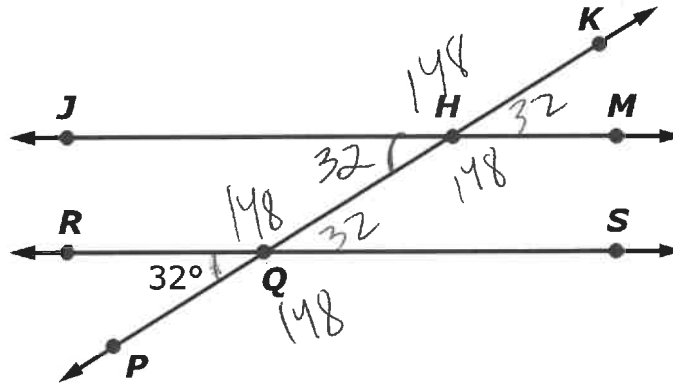
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		



$$\frac{15}{18} = \frac{20}{x}$$

$$\frac{360}{18} = 24$$

26. Transversal line KP passes through parallel lines JM and RS , as shown.



$$\begin{array}{r} 180 \\ - 32 \\ \hline 148 \end{array}$$

Complete the sentences to describe angle QHJ .

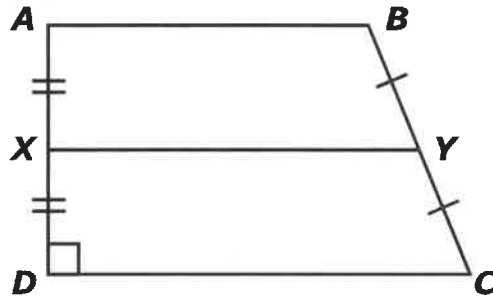
Angles PQR and QHJ are [congruent supplementary complementary] because they are [consecutive corresponding alternate exterior] angles.

The measure of angle QHJ is

<input type="button" value="←"/> <input type="button" value="→"/> <input type="button" value="↶"/> <input type="button" value="↷"/> <input type="button" value="✖"/>		
1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

Geometry EOC

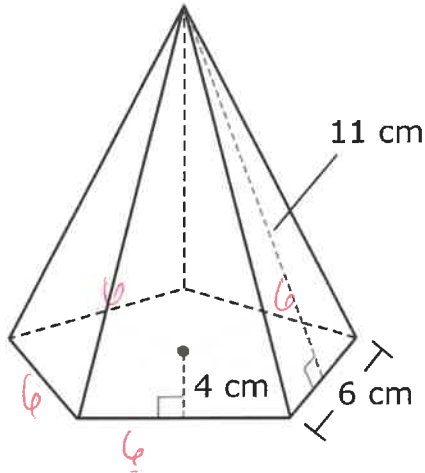
27. Trapezoid $ABCD$ is shown.



Select all the true statements.

- (A) $\overline{AX} \cong \overline{BY}$
- (B) $\overline{DX} \cong \overline{CY}$
- (C) $\overline{XY} \parallel \overline{CD}$
- (D) $XY = \frac{1}{2}(AB + CD)$
- (E) trapezoid $ABYX \cong$ trapezoid $XYCD$

28. A regular pentagonal pyramid is shown, with units in centimeters (cm). The slant height is 11 cm, the apothem of the base is 4 cm, and the side length of the base is 6 cm.



Which expression represents the surface area, in square centimeters, of the pyramid?

(A) $\frac{6 \cdot 11 \cdot 5}{2}$

(B) $6\left(4 + \frac{5 \cdot 11}{2}\right)$

(C) $\frac{4 \cdot 11}{2}(6 + 5)$

(D) $\frac{6 \cdot 5}{2}(4 + 11) = \underline{\underline{225}}$

SA: B + $\frac{1}{2} P l$ → ^{perimeter} slant area

area of base

$\frac{1}{2} a P + \frac{1}{2} (6 \cdot 5)(11)$

$\frac{1}{2} (4)(6 \cdot 5) + \frac{1}{2} (30)(11)$

$\frac{1}{2} (15)(11)$

$2(30) + 165$

~~180~~

225

Geometry EOC

29. Ashleigh draws a map of her town on a coordinate grid, where each unit represents 1 mile. A pizza shop in the town delivers to any location within a 6-mile radius.

- Ashleigh's house is located at point (9, 3).
- The pizza shop is located at point (6, 7).

Complete the sentences to describe whether Ashleigh's house is within the delivery radius of the pizza shop.

The shortest distance from the pizza shop to Ashleigh's house is

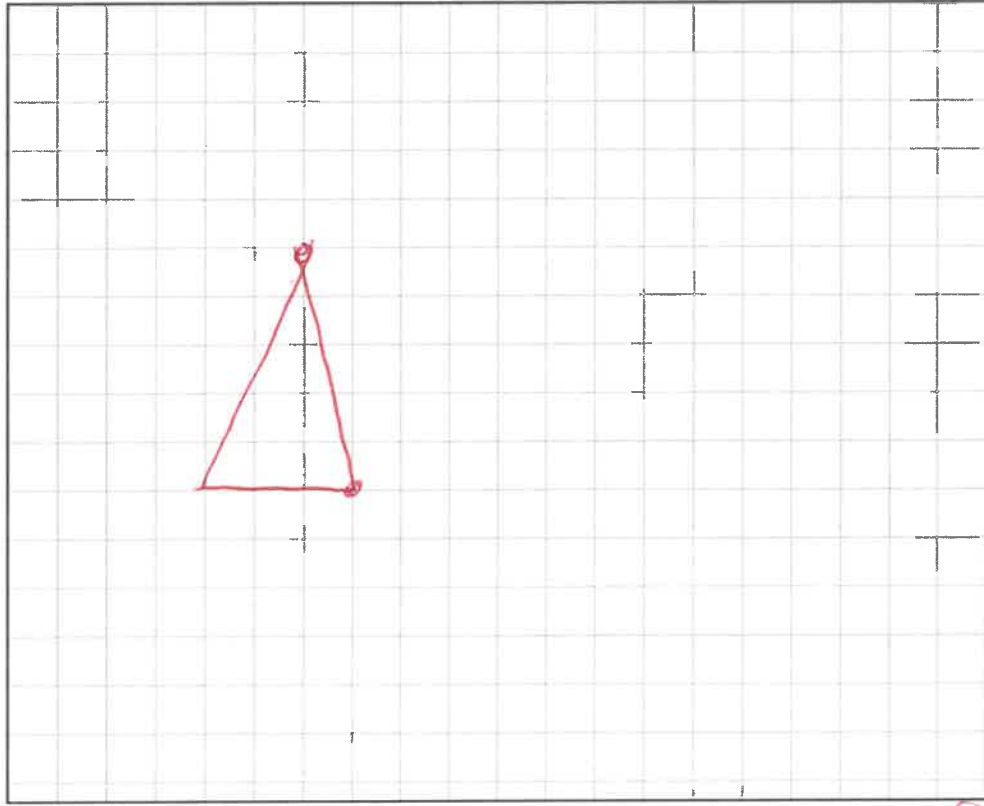
5			miles.	
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

Therefore, Ashleigh's house is [within outside] the delivery radius of the pizza shop.

$$\begin{aligned} & \sqrt{(7-3)^2 + (6-9)^2} \\ & \sqrt{4^2 + (-3)^2} \\ & \sqrt{16 + 9} \\ & \sqrt{25} = 5 \end{aligned}$$

30. Kyla claims that the sum of the interior angles of any closed figure is 360 degrees or greater.

Use the Connect Line tool to draw a figure that is a counterexample to Kyla's claim.

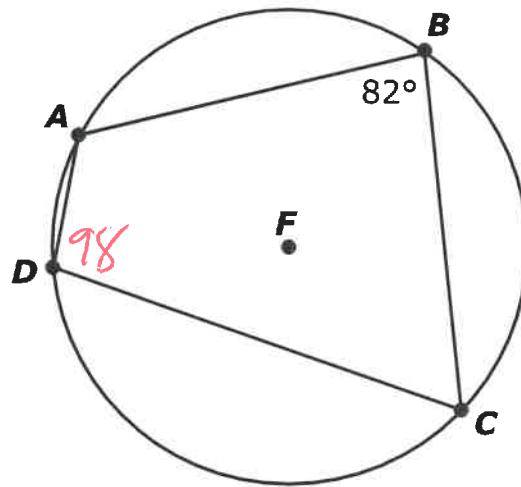


a triangle is 180°

use $180(n-2)$
to find degrees
of any polygon!

Geometry EOC

31. Quadrilateral $ABCD$ is inscribed in circle F , as shown.



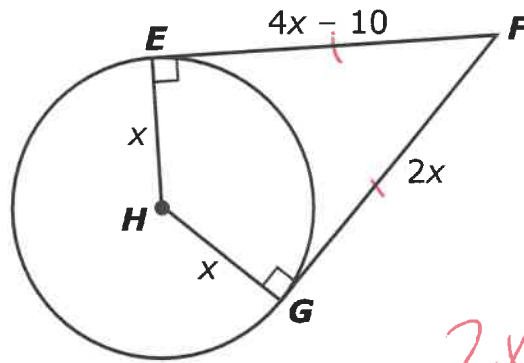
Complete the statements to describe the measure, in degrees, of $\angle ADC$.

Angle ABC and angle ADC are [complementary. congruent.
 supplementary.]

This means the measure of $\angle ADC =$

98				
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

32. A circle with two tangent segments is shown.



$$\begin{aligned}
 2x &= 4x - 10 \\
 -4x & \quad -4x \\
 \hline
 -2x &= -10 \\
 \frac{-2x}{-2} &= \frac{-10}{-2} \\
 x &= 5
 \end{aligned}$$

This question has **two** parts.

Part A

Which equation is true?

- Ⓐ $(4x - 10) = 2x$
- Ⓑ $x(4x - 10) = (2x)$
- Ⓒ $(4x - 10) + 2x = 180$
- Ⓓ $x + x + 2x + (4x - 10) = 360$

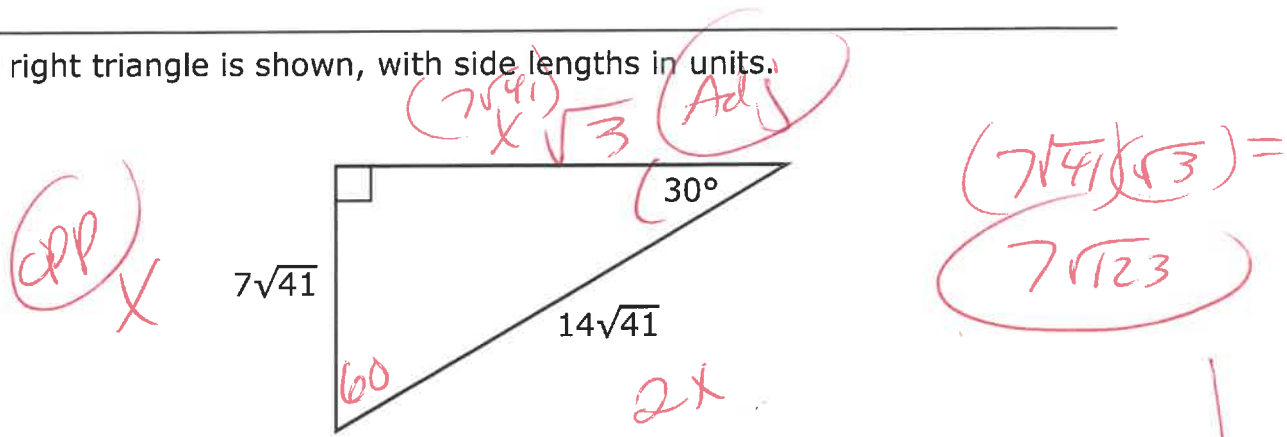
Geometry EOC

Part B

What is the value of x ?

5				
←	→	↶	↷	✖
1	2	3		
4	5	6		
7	8	9		
	0			
.	-	$\frac{\square}{\square}$		

33. A right triangle is shown, with side lengths in units.

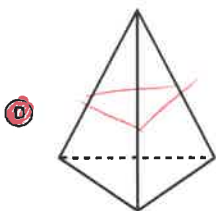
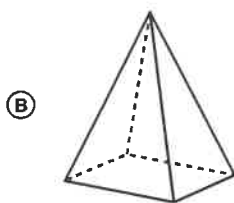
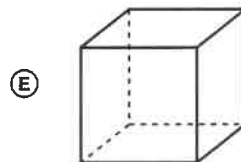
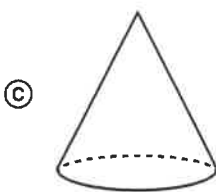
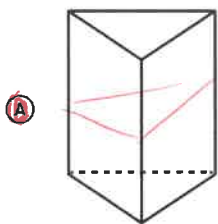


Select an expression to complete the trigonometric ratio for the triangle.

$$\tan(30^\circ) = \frac{7\sqrt{41}}{[\text{A } 7\sqrt{41} \quad \text{B } 14\sqrt{41} \quad \text{C } 7\sqrt{123} \quad \text{D } 14\sqrt{123}]}$$

Geometry EOC

34. Select all the figures that have a triangular cross section when sliced parallel to their bases.

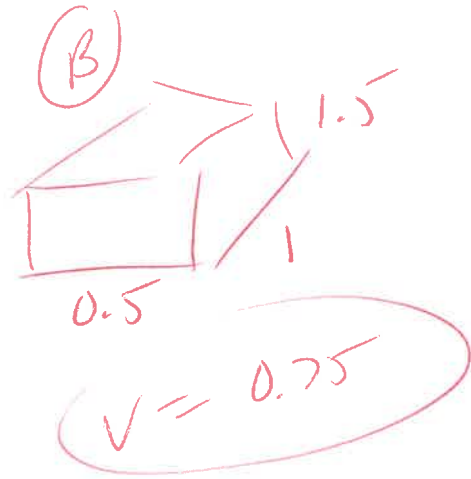
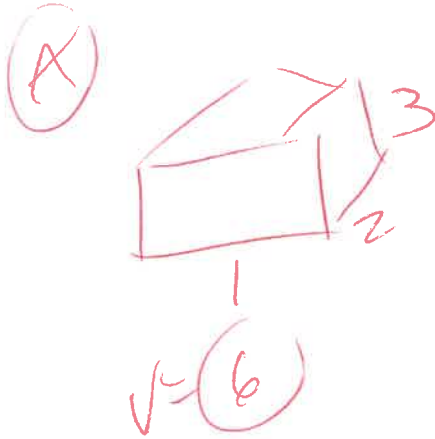


35. Prism A is dilated by a scale factor greater than 0 and less than 1 to create prism B.

Complete the sentences to compare the volume and surface area of the two prisms.

The volume of prism A is [A equal to B less than C greater than] the volume of prism B.

The surface area of prism A is [A equal to B less than C greater than] the surface area of prism B.

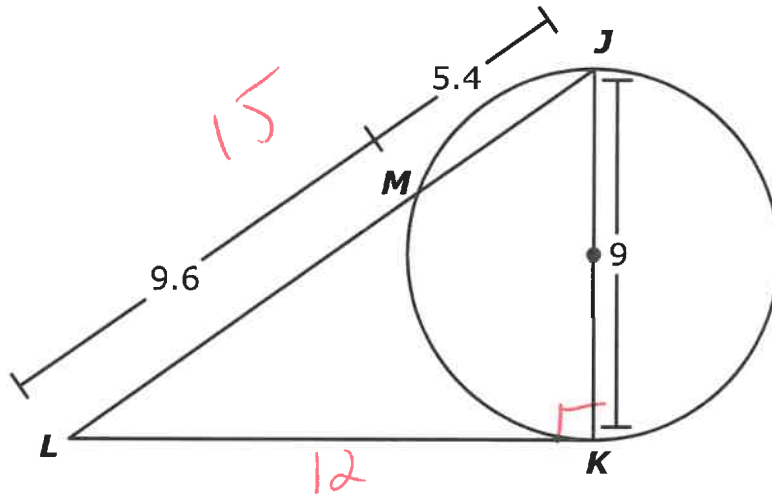


$0.5^3 = 1.25$

0.125

Geometry EOC

36. Line segments JK , KL , and LJ form triangle JKL , as shown, with dimensions in units.



- Segment KL is tangent to the circle.
- Segment LJ is a secant of the circle.
- Segment JK is a diameter of the circle.

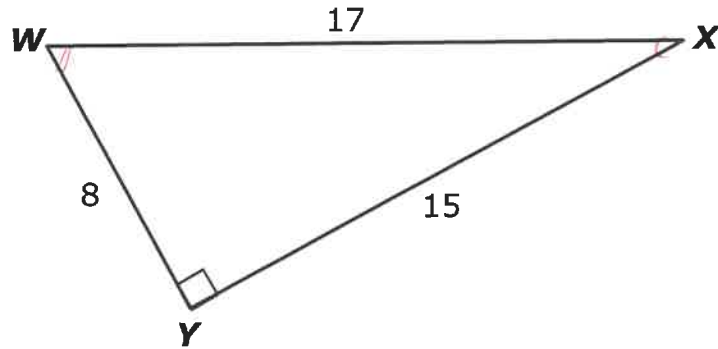
What is the perimeter, in units, of triangle JKL ?

$12 + 9 + 15 =$

36		
←	→	↶
↷	✖	
1	2	3
4	5	6
7	8	9
	0	
.	-	$\frac{\square}{\square}$

$$\begin{array}{r}
 15^2 = 9^2 + b^2 \\
 225 = 81 + b^2 \\
 -81 \quad -81 \\
 \hline
 144 = b^2 \\
 \sqrt{144} = b \\
 12 = b
 \end{array}$$

37. Triangle WXY is shown, with side lengths in units.



Match each trigonometric ratio to its value.

		$\frac{15}{17}$	$\frac{17}{15}$	$\frac{8}{17}$	$\frac{17}{8}$	$\frac{8}{15}$	$\frac{15}{8}$
$\cos(x)$	<i>adj</i> <i>Hyp</i>	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	<input type="radio"/> E	<input type="radio"/> F
$\tan(W)$	<i>opp</i> <i>Adj</i>	<input type="radio"/> G	<input type="radio"/> H	<input type="radio"/> I	<input type="radio"/> J	<input type="radio"/> K	<input checked="" type="radio"/> L

Geometry EOC

38. Maria has a circular pizza with a diameter of 12 inches. She cuts the pizza so that each slice has a central angle that measures 90 degrees.

What is the area, in square inches, of each slice of pizza?

9π

←			→			↶			↷			✖		
1	2	3	+	-	•	÷								
4	5	6	<	≤	=	≥	>							
7	8	9	□ [□]	□ _□	()		√□	∛□	π	i				
	0		sin	cos	tan	arcsin	arccos	arctan						
.	-	$\frac{\square}{\square}$												



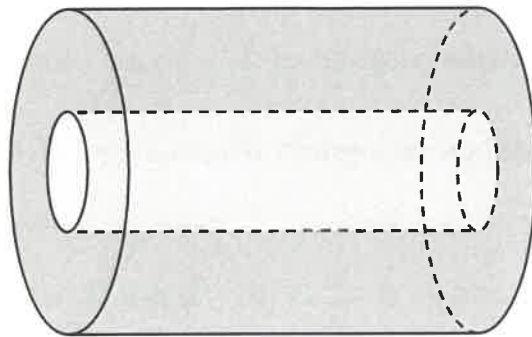
$$\frac{90}{360} \cdot \pi r^2$$

$$\frac{90}{360} \cdot \pi (6)^2$$

$$\frac{90}{360} \cdot \frac{36}{1} \cdot \pi = \frac{3240}{360} \pi$$

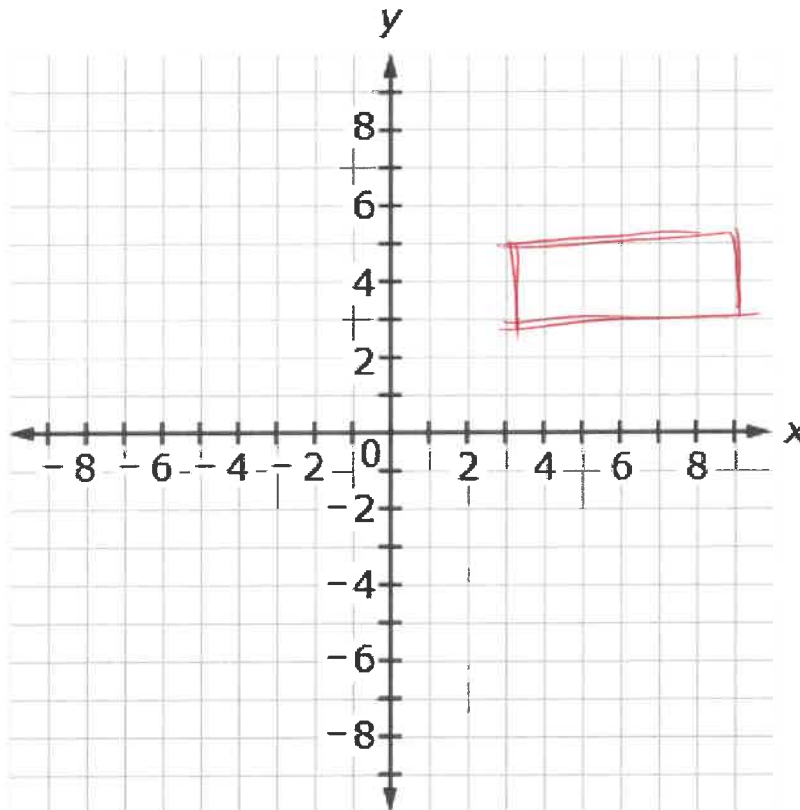
9π

39. Karina draws a figure on the coordinate plane. Then, she rotates the figure around the x-axis. The resulting object is shown.



rectangle

Use the Connect Line tool to create a possible figure that Karina could have drawn.



Geometry EOC

40. The transformations given are performed on pentagon $ABCDE$ to create pentagon $A'B'C'D'E'$.

- $(x, y) \rightarrow (x - 5, y - 6)$ *translation*
- counterclockwise rotation of 37° about the origin *rotation*

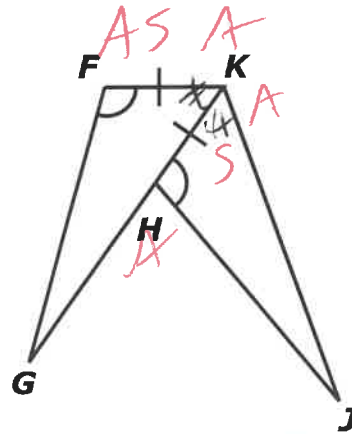
Complete the sentence to explain whether or not the pentagons are congruent.

Pentagons $ABCDE$ and $A'B'C'D'E'$ [A] are [B] are not] congruent because [A] each [B] neither [C] only the first [D] only the second] transformation preserves side lengths and angle measures.

*Rigid
Motion*

41. A figure is shown.

- Segment KG bisects angle FKJ .
- Angles GFK and JHK are congruent.
- Line segments FK and HK are congruent.



Angle Side angle

Geometry EOC

A partial proof is shown.

Statement	Reason
1. $\overline{FK} \cong \overline{HK}$ and $\angle GFK \cong \angle JHK$	1. Given
2. \overline{KG} bisects $\angle FKJ$	2. Given
3. $\angle FKG \cong \angle JKG$	3. Definition of angle bisector
4. $\triangle GFK \cong \triangle JHK$	4. ASA

What could be Reason 4?

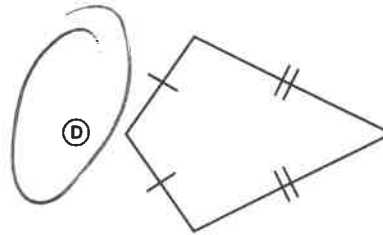
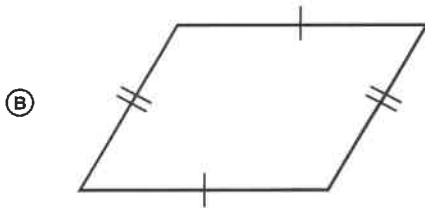
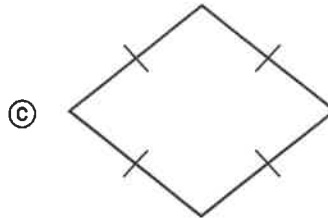
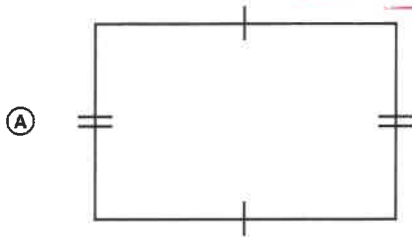
- (A) Side-Angle-Side congruence
- (B) Hypotenuse-Leg congruence
- (C) Angle-Angle-Side congruence
- (D) Angle-Side-Angle congruence

42. Johanna makes the following claim:

"If a polygon is a quadrilateral, then two pairs of opposite sides are congruent."

NON-EX.

Which polygon is a counterexample to Johanna's claim?



Geometry EOC

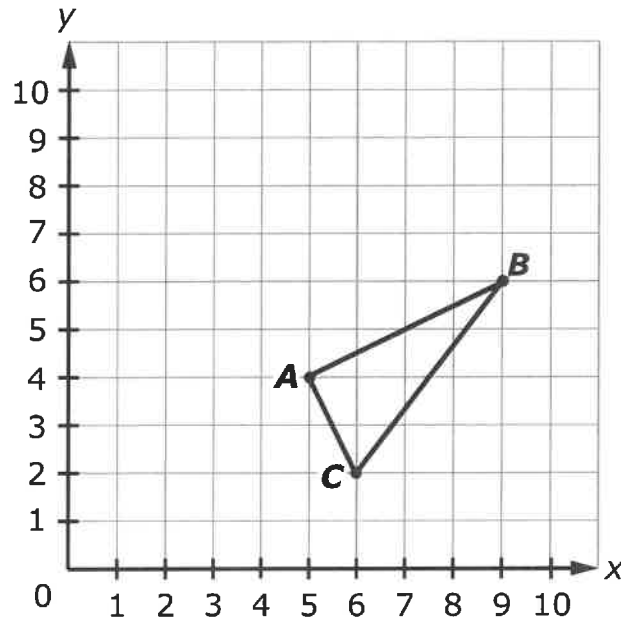
43. A sequence of transformations maps triangle QRS onto congruent triangle XYZ .

Select all the sequences of transformations that could have mapped triangle QRS onto triangle XYZ .

- A a reflection across the x -axis, followed by a 90° clockwise rotation about the origin
- B a 180° clockwise rotation about the origin, followed by a reflection across the line $y = 3$
- C a dilation by a scale factor of 3 centered at the origin, followed by a translation 5 units down
- D a reflection across the line $y = x$, followed by a dilation by a scale factor of $\frac{1}{3}$ centered at the origin
- E a translation 1 unit left and 3 units up, followed by a 270° counterclockwise rotation about the origin



Rigid
Motion
Translation, Reflection, Rotation

44. Triangle ABC is shown on the coordinate grid.

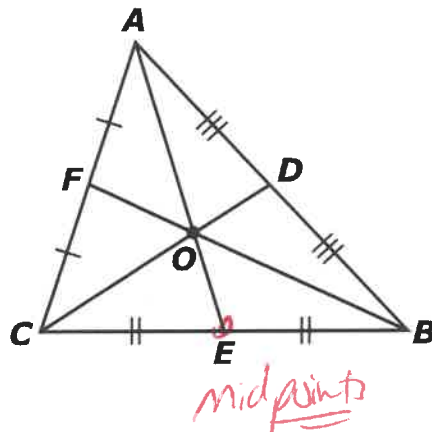


Geometry EOC

Complete the steps to describe a sequence of transformations that will map triangle ABC onto itself.

Step 1	Translate triangle ABC 4 units up.															
Step 2	<p>Translate triangle ABC</p> <p><input type="text" value="4"/></p> <p></p> <table border="1"><tbody><tr><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td></td><td>0</td><td></td></tr><tr><td>.</td><td>-</td><td>$\frac{\square}{\square}$</td></tr></tbody></table> <p>units down.</p>	1	2	3	4	5	6	7	8	9		0		.	-	$\frac{\square}{\square}$
1	2	3														
4	5	6														
7	8	9														
	0															
.	-	$\frac{\square}{\square}$														
Step 3	<p>Dilate triangle ABC by a scale factor of</p> <p><input type="text" value="1"/></p> <p></p> <table border="1"><tbody><tr><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td></td><td>0</td><td></td></tr><tr><td>.</td><td>-</td><td>$\frac{\square}{\square}$</td></tr></tbody></table> <p>centered at the origin.</p>	1	2	3	4	5	6	7	8	9		0		.	-	$\frac{\square}{\square}$
1	2	3														
4	5	6														
7	8	9														
	0															
.	-	$\frac{\square}{\square}$														

45. A figure is shown.



Complete the statement to describe $\triangle ABC$.

The [~~A~~ medians ~~B~~ angle bisectors ~~C~~ perpendicular bisectors] of $\triangle ABC$ meet at point [~~A~~ C. ~~B~~ D. ~~C~~ O.]

2, 4, ~~5~~, 6, 7, 9, 10, 12, ~~15~~, 19, 22, ~~23~~, ~~24~~, 25, 26, 27
40, 41, ~~42~~, ~~43~~, 44

~~Wait~~ wait for ^{all} ~~rest~~ done!! Completed