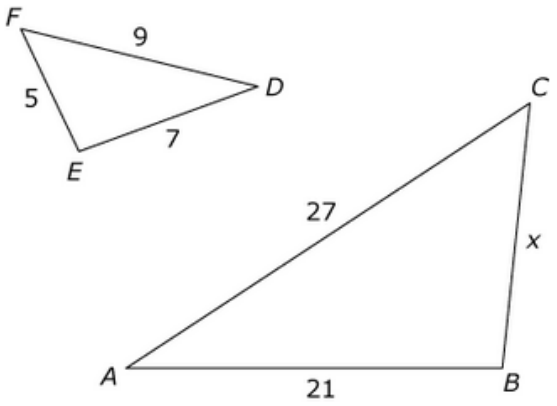
Geometry PARCC EOY Sample Assessment Item #1 (non-calculator): Standard G-SRT.5

The figure shows $\triangle ABC \sim \triangle DEF$ with side lengths as indicated.



What is the value of x?

Enter your answer in the box.

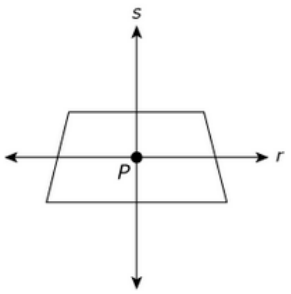
1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #2 (non-calculator): Standard G-CO.3

The figure shows two perpendicular lines *s* and *r* intersecting at point *P* in the interior of a trapezoid. Line *r* is parallel to the bases and bisects both legs of the trapezoid. Line *s* bisects both bases of the trapezoid.



Which transformation will always carry the figure onto itself?

Select **all** that apply.

- ☐ A. a reflection across line *r*
- ☐ B. a reflection across line *s*
- ☐ C. a rotation of 90° clockwise about point *P*
- ☐ D. a rotation of 180° clockwise about point *P*
- ☐ E. a rotation of 270° clockwise about point *P*

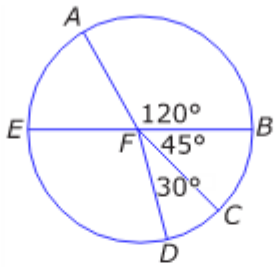
1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #3 (non-calculator): Standard G-C.B.Int.1

The circle with center F is divided into sectors. In circle F, EB is a diameter. The radius of circle F is 3 units.



Drag and drop each arc length to its subtended central angle.

$\frac{\pi}{2}$ π 2π $\frac{3\pi}{4}$

Subtended Central Angle	Arc Length
$\angle AFB$	
$\angle BFC$	
$\angle CFD$	
$\angle AFE$	

1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

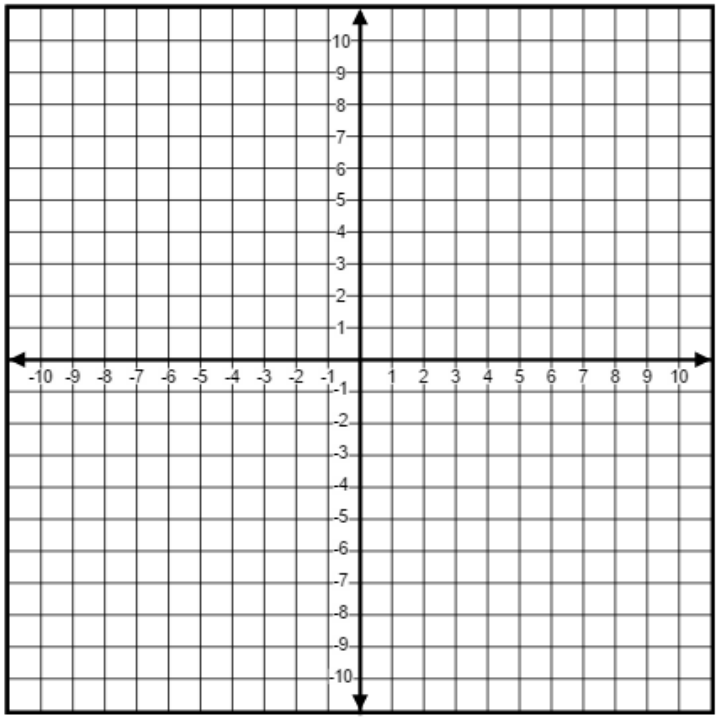
Geometry PARCC EOY Sample Assessment Item #5 (non-calculator): Standard G-GPE.6

Line segment JK in the coordinate plane has endpoints with coordinates $(-4, 11)$ and $(8, -1)$. Graph $\overline{JK}$ and find two possible locations for point M so that M divides $\overline{JK}$ into two parts with lengths in a ratio of 1:3.

To graph a line segment, select segment JK and then plot two points on the coordinate plane. A segment will connect the points. Select Point M and then plot the two points.

segment JK

Point M



1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #6 (non-calculator): Standard G-GPE.1-2

The equation $x^2 + y^2 - 4x + 2y = b$ describes a circle.

Part A

Determine the *y*-coordinate of the center of the circle.

Enter your answer in the box.

Part B

The radius of the circle is 7 units. What is the value of *b* in the equation?

Enter your answer in the box.

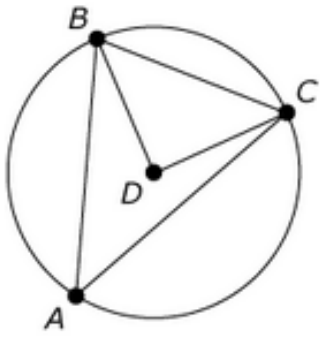
1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #1 (calculator): Standard G-C.2

The figure shows $\triangle ABC$ inscribed in circle D.



If $m\angle CBD = 44^\circ$, find $m\angle BAC$.

Enter your answer in the box.

_____ degrees

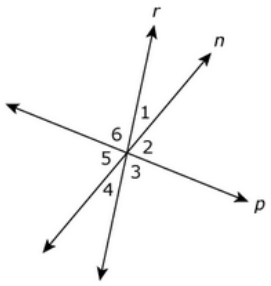
1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #2 (calculator): Standard G-CO.1

The figure shows lines *r*, *n*, and *p* intersecting to form angles numbered 1, 2, 3, 4, 5, and 6. All three lines lie in the same plane.



not to scale

Based on the figure, which of the individual statements would provide enough information to conclude that line *r* is perpendicular to line *p* ?

Select **all** that apply.

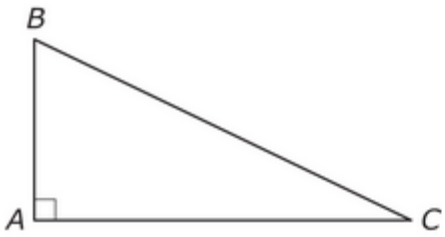
- A. $m\angle 2 = 90^\circ$
- B. $m\angle 6 = 90^\circ$
- C. $m\angle 3 = m\angle 6$
- D. $m\angle 1 + m\angle 6 = 90^\circ$
- E. $m\angle 3 + m\angle 4 = 90^\circ$
- F. $m\angle 4 + m\angle 5 = 90^\circ$

1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #3 calculator): Standard G-SRT.7-2



In right triangle ABC, $m\angle B \neq m\angle C$. Let $\sin B = r$ and $\cos B = s$. What is $\sin C - \cos C$?

- A. $r + s$
- B. $r - s$
- C. $s - r$
- D. $\frac{r}{s}$

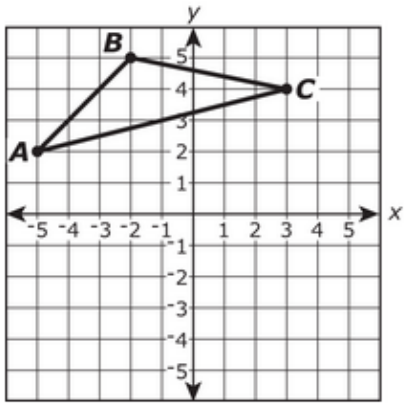
1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #4 (calculator): Standard G-CO.6

Triangle *ABC* is shown in the *xy*-coordinate plane.



The triangle will be rotated 180° clockwise around the point $(3, 4)$ to create triangle $A'B'C'$. Indicate whether each of the listed features of the image will or will not be the same as the corresponding feature in the original triangle by selecting the appropriate box in the table.

	The coordinates of A'	The coordinates of C'	The perimeter of $\triangle A'B'C'$	The area of $\triangle A'B'C'$	The measure of $\angle B'$	The slope of $\overline{A'C'}$
Will be the Same	○	○	○	○	○	○
Will Not be the Same	○	○	○	○	○	○

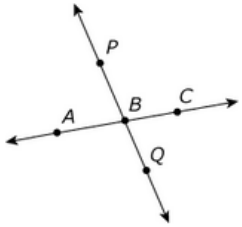
1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.

Geometry PARCC EOY Sample Assessment Item #6 (calculator): Standard G-SRT.1a

The figure shows $\overleftrightarrow{AC}$ and $\overleftrightarrow{PQ}$ intersecting at point B. $\overleftrightarrow{A'C'}$ and $\overleftrightarrow{P'Q'}$ will be the images of lines AC and PQ, respectively, under a dilation with center P and scale factor 2.



Use the choices in the drop-down menus to complete the sentence.

Line $A'C'$ will be Choose... $\overleftrightarrow{AC}$ and line $\overleftrightarrow{P'Q'}$ will be Choose... $\overleftrightarrow{PQ}$.

Choose...
parallel to
perpendicular to
the same line as

1. What do you know about the problem?

2. What questions do you have?

3. Explain your reasoning or thinking in solving the problem.