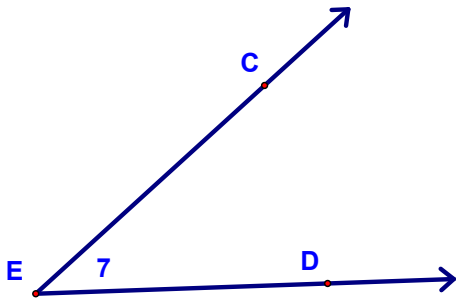
1.

**What are the three possible names for the line shown?**


1. $\overleftrightarrow{AB}$
2. $\overleftrightarrow{BA}$
3. line l

2.

**What are the four possible names for the angle shown?**




1. ∠CED
2. ∠DEC
3. ∠E
4. ∠7

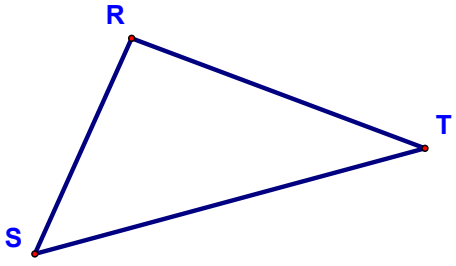
3.

**Can the ray shown be called $\overrightarrow{XY}$?**


No! It can only be called $\overrightarrow{YX}$ with the information shown.

4.

**Name the sides of △RST.**




$\overline{RT}$, $\overline{TS}$, and $\overline{SR}$

5.

a. $\overline{AB} \cap \overline{BC}$ = Point B

b. $\overrightarrow{EC} \cup \overrightarrow{EA}$ = $\overleftrightarrow{AC}$ or $\angle AEC$

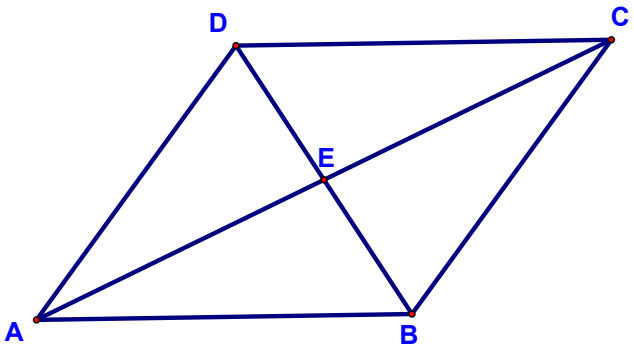
c. $\overleftrightarrow{AC} \cap \overleftrightarrow{DB}$ = Point E

d. $\overline{DC} \cap \overline{AB}$ = $\varnothing$

e. $\overrightarrow{AC} \cap \overrightarrow{EC}$ = $\overrightarrow{EC}$

f. $\overrightarrow{BA} \cup \overrightarrow{BC}$ = $\angle ABC$

g. $\overline{EC} \cup \overline{CB} \cup \overline{BE}$ = $\triangle BEC$




6.

a. Name $\angle OPR$ in all possible ways.

$\angle RPO$, $\angle RPS$, $\angle SPR$

b. What is the vertex of $\angle TOS$?

O

c. How many angles have vertex R?

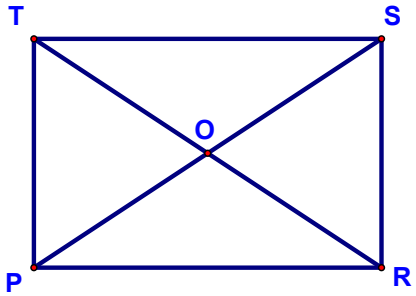
3

d. Name $\angle TSP$ is all other possible ways.

$\angle PST$, $\angle OST$, $\angle TSO$

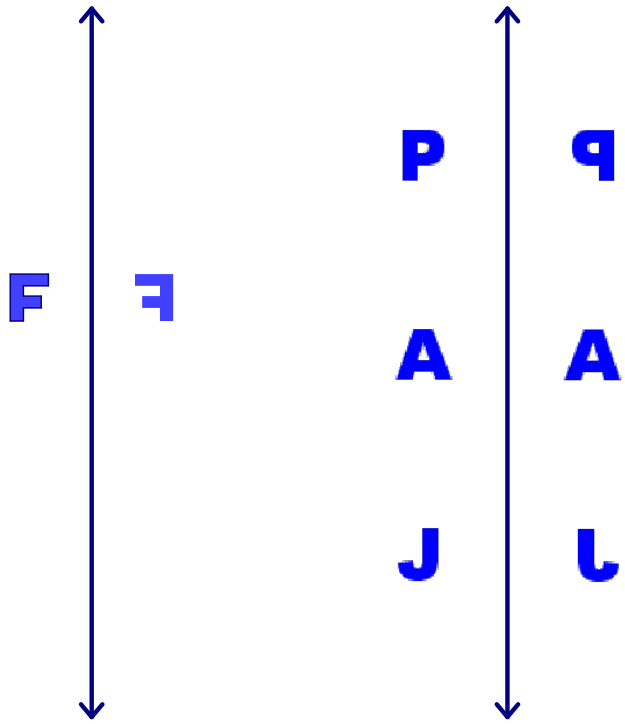
e. How many $\triangle$s are there in the figure?

8



7.

**The figure on the left shows the reflection of the letter F over a line. Draw the reflections of the letters P, A, and J over the line shown on the right.**



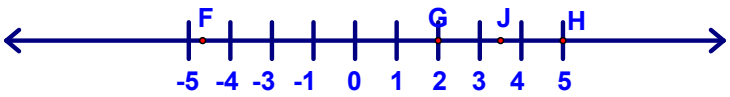
8.

**a. A line is made up of** points **.**

**b. An angle is the union of two** rays **with a common** endpoint **.**

9.

**Draw a number line and label point F, G, H, and J with the coordinates $-4\frac{2}{3}$, 2, 5, and 3.5 respectively. One of these points is the *midpoint* (the halfway point) between two others. Which is it?**




**Point J!!**

10.

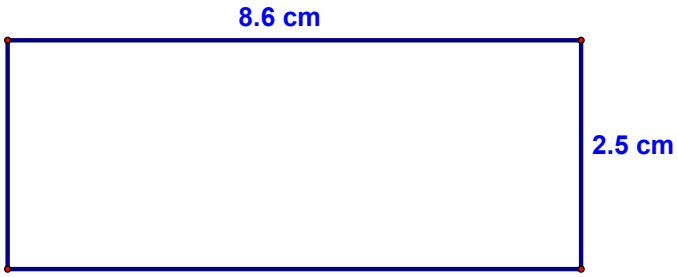
**Given a rectangle with sides 2.5 cm and 8.6 cm long, find**

**a. The rectangle's area**

$A = l * w = (8.6)(2.5) = 21.5 \text{ cm}^2$

**b. The rectangle's perimeter (the distance around it)**

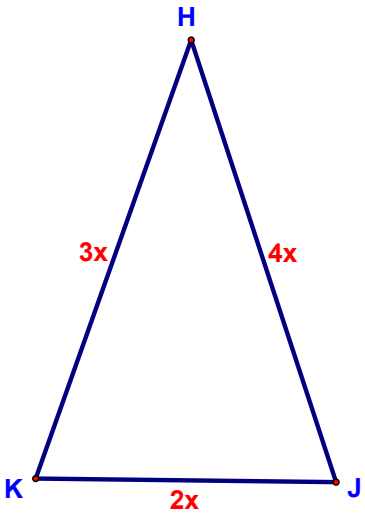
$P = 2(8.6) + 2(2.5) = 22.2 \text{ cm}$




11.

**a. In $\Delta HJK$, $\overline{HJ}$ is twice as long as $\overline{JK}$ and exactly as long as $\overline{HK}$. If the length of $\overline{HJ}$ is 15, find the perimeter of $\Delta HJK$.**

**b. If the length of $\overline{HJ}$ was 4x, the length of $\overline{HK}$ was 3x, the length of $\overline{JK}$ was 2x, and the perimeter of $\Delta HJK$ was 63, what would be the length of $\overline{HJ}$?**




$2x = 15$

$\Rightarrow x = \frac{15}{2}$

$\Rightarrow P = 5x = \frac{75}{2}$

$4x + 3x + 2x = 63$

$\Rightarrow 9x = 63$

$\Rightarrow x = 7$

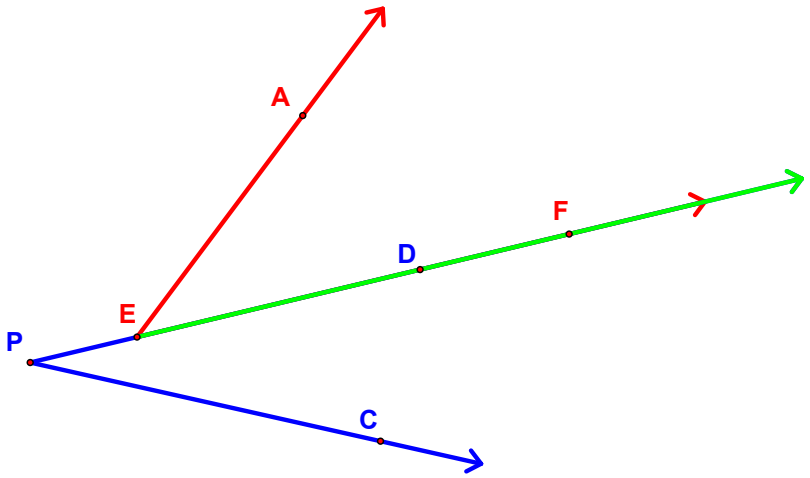
$\therefore HJ = 4x = 4(7) = 28$

12.

**Draw a diagram in which $\overline{AB} \cap \overline{CD} = \overline{CB}$**


13.

**Draw a diagram in which the intersection of $\angle AEF$ and $\angle DPC$ is $\overrightarrow{ED}$.**




14.

**a. What percentage of the $\Delta$s in the diagram have $\overline{CT}$ as a side?**

**3 of the 8 $\Delta$s have $\overline{CT}$ as a side, so $\frac{3}{8} = 37.5\%$**

**b. What percentage have $\overline{AC}$ as a side?**

**2 of the 8 $\Delta$s have $\overline{AC}$ as a side, so $\frac{2}{8} = 25\%$**