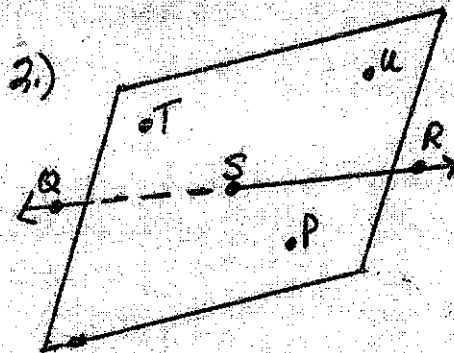


What are the names of 3 collinear points?

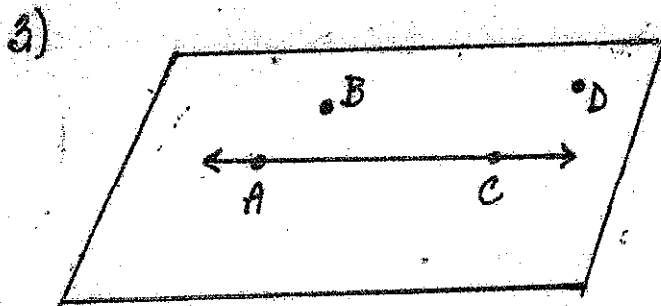
\overleftrightarrow{F} ; \overleftrightarrow{B} ; \overleftrightarrow{E}
on the same line



on same plane
↓

What are the names of four coplanar pts

\overleftrightarrow{T} ; \overleftrightarrow{S} ; \overleftrightarrow{U} ; \overleftrightarrow{P}



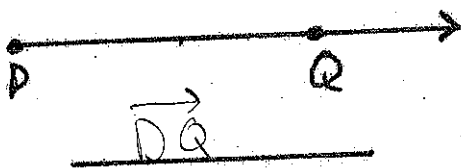
Name the line and plane shown in the diagram.

\overleftrightarrow{AC}

Plane ABC or

Plane ACD (or other combos)

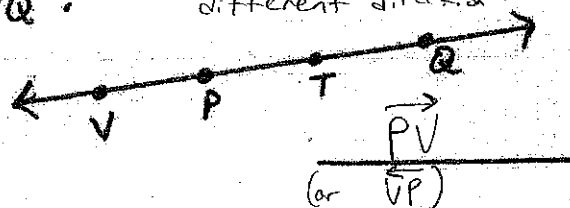
4.) Name the ray in the figure.



5.) What is the ray that is opposite

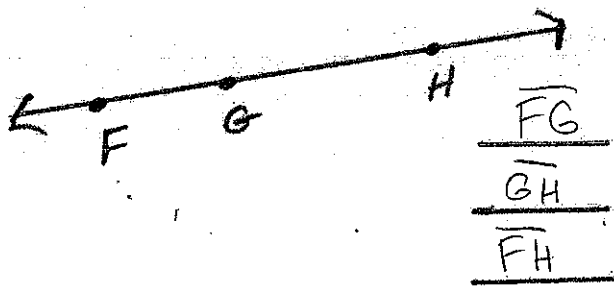
\overrightarrow{PQ} ?

same endpoint
different direction

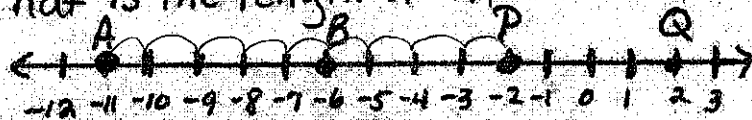


(or \overrightarrow{VP})

6.) What are the names of the three different segments in the figure?



1.) What is the length of \overline{AP} .



9 units

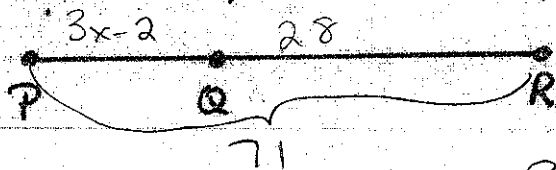
2.) If $AB = 8$ and $AC = 21$, find the value of BC .



$$8 + BC = 21$$

$$BC = 21 - 8 = \boxed{13}$$

3.) If $PQ = 3x - 2$, $QR = 28$, and $PR = 71$, find the value of x .

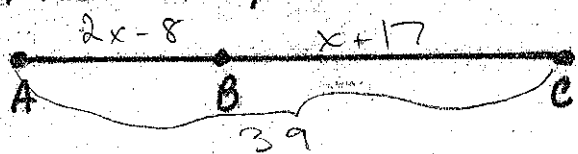


$$3x - 2 + 28 = 71$$

$$3x + 26 = 71$$

$$\begin{array}{r} 3x + 26 = 71 \\ -26 \quad -26 \\ \hline 3x = 45 \\ \frac{3x}{3} = \frac{45}{3} \\ x = 15 \end{array}$$

4.) If $AB = 2x - 8$, $BC = x + 17$, and $AC = 39$ m. Find the value of x , AB , and BC .



$$2x - 8 + x + 17 = 39$$

$$3x + 9 = 39$$

$$\begin{array}{r} 3x + 9 = 39 \\ -9 \quad -9 \\ \hline 3x = 30 \\ \frac{3x}{3} = \frac{30}{3} \\ x = 10 \end{array}$$

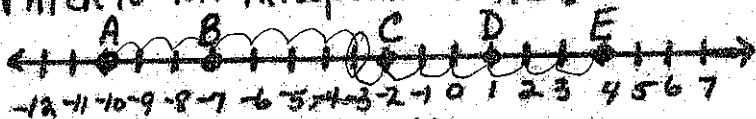
$$AB = 2(10) - 8$$

$$\boxed{AB = 12}$$

$$BC = (10) + 17$$

$$\boxed{BC = 27}$$

5.) Which is the midpoint of \overline{AE} ?

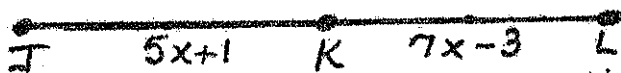


$$AE = 14$$

$$14 \div 2 = 7$$

$\boxed{-3}$

6.) If K is the midpoint of \overline{JL} , what are JK , KL and JL .



$$\overline{JK} \cong \overline{KL}$$

$$5x + 1 = 7x - 3$$

$$\begin{array}{r} 5x + 1 = 7x - 3 \\ -5x \quad -5x \\ \hline 1 = 2x - 3 \\ +3 \quad +3 \\ \hline 4 = 2x \end{array}$$

$$\frac{4}{2} = \frac{2x}{2}$$

$$\boxed{2 = x}$$

$$JK = 5(2) + 1$$

$$\boxed{JK = 11}$$

$$KL = 7(2) - 3$$

$$\boxed{KL = 11}$$

$$JL = JK + KL = 11 + 11$$

$$\boxed{JL = 22}$$