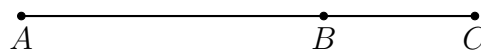


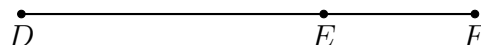
PreTest: I can solve for angle measures

Do Now: Answer the questions then work these length calculation problems

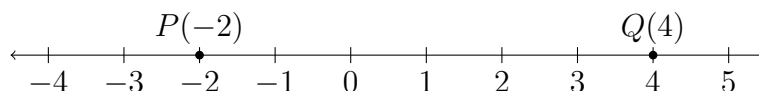
1. I have my own calculator with me today. (circle one). Yes No
2. I have a notebook, ruler, and protractor (circle one). Yes No
3. Given \overline{ABC} , $AB = 84$, and $AC = 116$. Find BC .



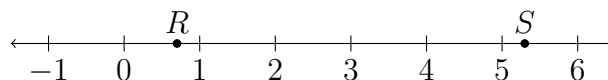
4. Given \overline{DEF} , $DE = 7\frac{1}{3}$, and $EF = 3\frac{1}{6}$. Find DF .



5. Find the distance between P and Q .



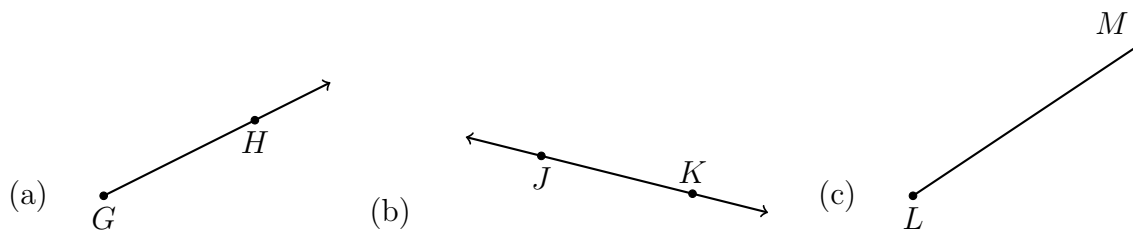
6. Find RS , given $R = 0.7$ and $S = 5.3$.



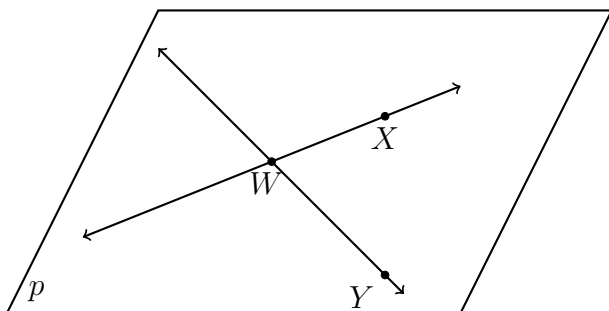
7. Draw the ray \overrightarrow{WV} with a straight edge (or ruler). Measure VW in centimeters.

 \dot{V}
 \dot{W}

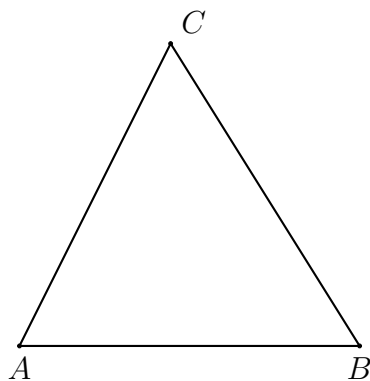
8. A flat surface is a(n) _____.
9. Two line segments or angles of equal measure are _____.
10. Use conventional notation to write the names of the ray, line, and segment shown.



11. Points that are all located on the same plane are _____.
12. Identify three points in the given plane.



13. Given isosceles $\triangle ABC$ with $\overline{AB} \cong \overline{AC}$. On the diagram mark the congruent line segments with tick marks.

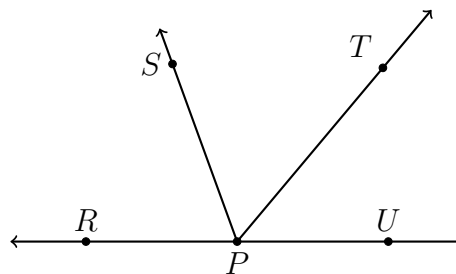


14. Given the situation in the diagram, answer each question. Circle True or False.

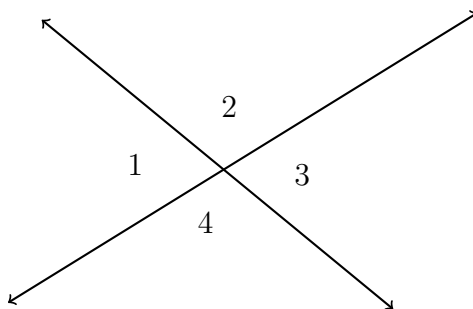
(a) T or F: \overrightarrow{PR} and \overrightarrow{PU} are opposite rays.

(b) T or F: $\angle TPR$ is an obtuse angle.

(c) T or F: $\angle RPS$ and $\angle TPU$ are adjacent angles.



15. As shown below, two lines intersect making four angles: $\angle 1$, $\angle 2$, $\angle 3$, and $\angle 4$.



(a) Given that $m\angle 1 = 75^\circ$, find $m\angle 2 =$ _____

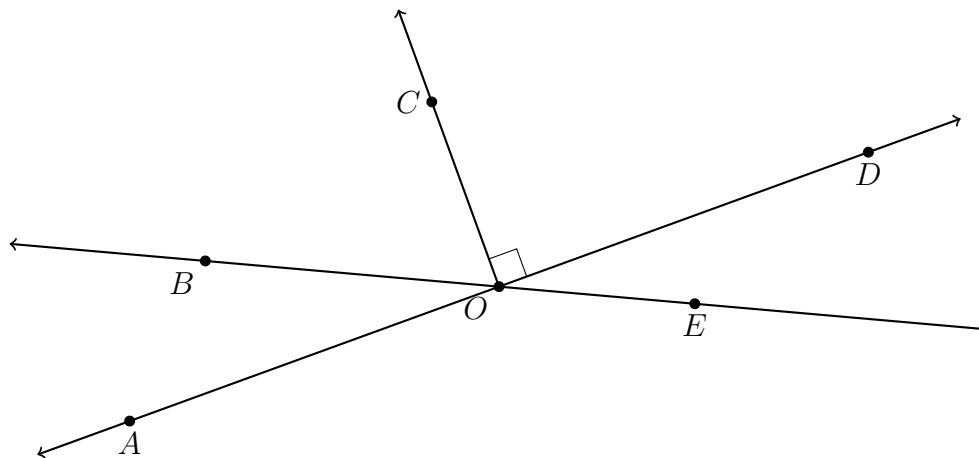
(b) Find $m\angle 3 =$ _____

(c) True or false, $\angle 1$ and $\angle 4$ are supplementary angles. _____

16. (a) Given, the diagram below. Name a right angle: _____

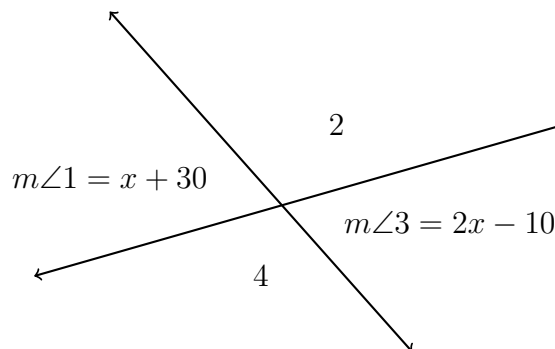
(b) Name the angle that is opposite to $\angle AOB$: _____

(c) Name an angle that is supplementary to $\angle COB$: _____

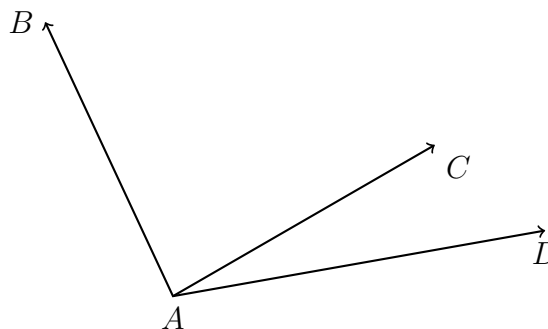


For full credit on these three problems, start with an equation and check your solution.

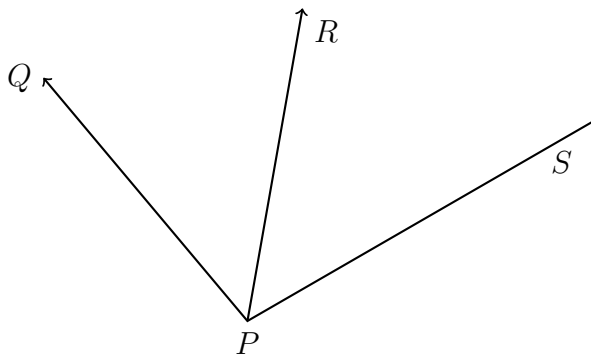
17. As shown below, two lines intersect making four angles: $\angle 1$, $\angle 2$, $\angle 3$, and $\angle 4$. Given that $m\angle 1 = x + 30$ and $m\angle 3 = 2x - 10$, find $m\angle 1$.



18. Given $m\angle BAC = 5x - 5$ and $m\angle DAC = x$, $m\angle BAD = 115^\circ$. Find $m\angle BAC$.



19. An angle bisector is shown below, with \overrightarrow{PR} bisecting $\angle QPS$. Given $m\angle QPR = 4x + 2$ and $m\angle QPS = 10x - 20$, find $m\angle QPS$.



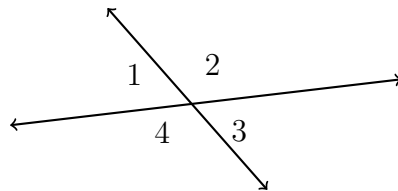
Do Not Solve! Make a drawing on the right, an equation to the left, and circle where it states what to find.

20. The point Q is the midpoint of \overline{PR} , $PQ = 11$, and $QR = 2x + 1$. Find x .
21. Given \overline{PQR} , with $PQ = 3x - 7$, $QR = x + 3$, and $PR = 12$. Find x .
22. Given that Q bisects \overline{PR} . $PQ = 2x - 5$, $PR = 42$. Find x .
23. The points P , Q , and R are collinear, with $PQ = x + 4$ and $PR = 27$. \overline{QR} is twice the length of \overline{PQ} . Find x .

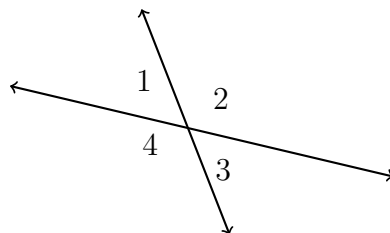
Do Not Solve!

Model the situation with an equation. Circle where it states what to find.

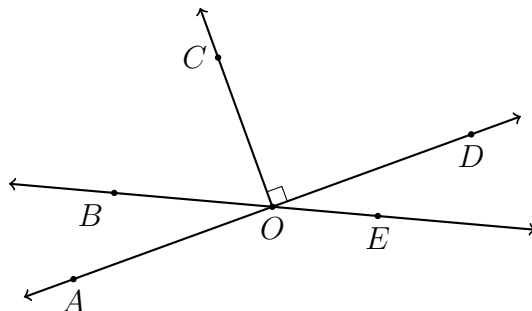
24. Two lines intersect making four angles: $\angle 1$, $\angle 2$, $\angle 3$, and $\angle 4$. Given that $m\angle 1 = 4x + 30$ and $m\angle 2 = 8x - 10$, find x .



25. Given that $m\angle 2 = 5x + 30$ and $m\angle 4 = 7x - 10$ as shown in the diagram, find $m\angle 2$.



26. In the diagram below $\angle AOB = 30^\circ$ and $\angle COB = 5x + 10$. Find x .



27. In the diagram below $\angle DOE = 60^\circ$ and $\angle DOB = 13x - 10$. Find x .

