



Worksheet

Grade 7 - Mathematics

Chapter 5 – Lines and Angles

A. Choose the correct option.

1) How many lines are formed when two lines intersect?

- a) 1 b) 2 c) 4 d) 8

2) How many angles are formed when a transversal intersects two lines?

- a) 1 b) 2 c) 4 d) 8

3) One of the angles in a linear pair is 60° . The other angle will be:

- a) 60° b) 90° c) 120° d) 30°

4) Adjacent angles share _____.

- a) An arm only b) an arm and vertex c) a vertex only d) none of these

5) If one of the angles at an intersection of two lines is 40° , which other three angles?

- a) 80° b) 160° c) 140° d) 100°

B. State whether true or false.

1) All adjacent angles form linear pairs.

2) Vertically opposite angles are adjacent.

3) A transversal cannot intersect lines that are not parallel.

4) If corresponding angles are equal, the lines must be parallel

5) If interior angles on the same side of the transversal add to 180° , the lines must be parallel.

C. Fill in the blanks.

1) Complementary angles add up to _____.

2) Supplementary angles add up to _____.

3) If one of the complementary angles is half of the other, the larger angle is _____.

4) If one of the supplementary angles is 3 times the other, the larger angle is _____.

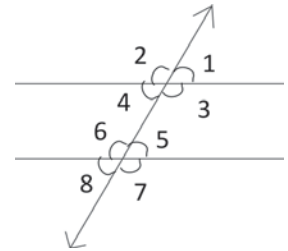
5) In a rectangle, a diagonal can be considered as a _____ of the opposite

sides.

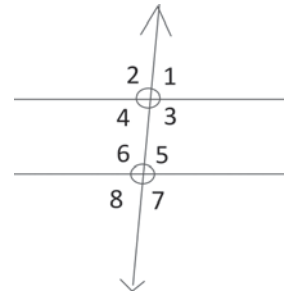
D. Answer the following questions.

- Both the interior angles on the same side of the transversal are acute angles. What can you say about the lines it intersects? Why?

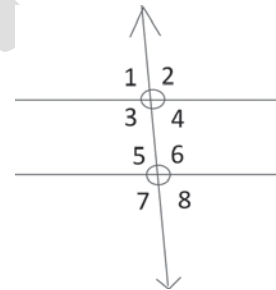
- In the figure, $\angle 1 = 50^\circ$. Find angles $\angle 2$, $\angle 5$ and $\angle 6$.



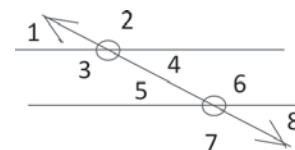
- In the figure, $\angle 4 = 85^\circ$. Find angle $\angle 8$.



- In the figure, $\angle 6 = 100^\circ$. Find angle $\angle 1$.

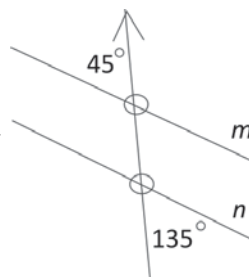
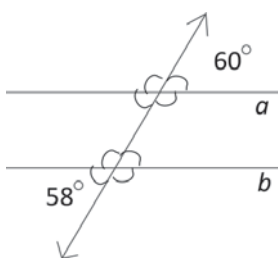
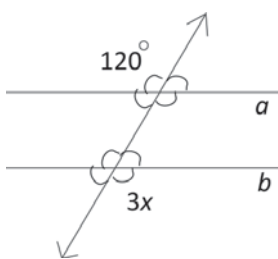


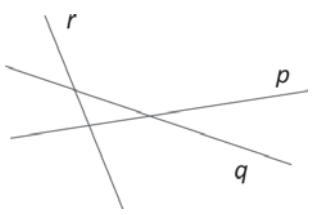
- In the figure, $\angle 3 = 150^\circ$. Find angle $\angle 6$.



E. Answer the following questions.

- In the figure, line segments a and b are parallel. find the value of x .
- In the figure, determine if line segments a and b are parallel.
- In the figure, determine if line segments m and n are parallel.
- In the figure, are the lines p , q and r are concurrent? Give reason.
- In a linear pair, can both angles be acute angles? Explain.



(1)	(2)	(3)	 <p data-bbox="1404 448 1452 492">(4)</p>
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