

**Class:** 7

**Chapter:** Lines and Angles

**Maximum Marks:** 30

**Time:** 1 Hour

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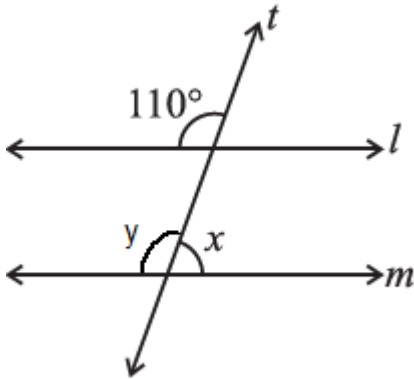
**Section A: Multiple Choice Questions (MCQs) [1 mark each]**

1. What is the measure of a right angle?
  - a)  $45^\circ$
  - b)  $90^\circ$
  - c)  $180^\circ$
  - d)  $60^\circ$
2. If two angles are supplementary and one angle is  $70^\circ$ , what is the measure of the other angle?
  - a)  $90^\circ$
  - b)  $100^\circ$
  - c)  $110^\circ$
  - d)  $180^\circ$
3. If two lines intersect, the vertically opposite angles are:
  - a) Equal
  - b) Supplementary
  - c) Complementary
  - d) Different
4. A linear pair of angles adds up to:
  - a)  $90^\circ$
  - b)  $180^\circ$
  - c)  $270^\circ$
  - d)  $360^\circ$
5. If  $\angle A = 65^\circ$  and  $\angle B$  is complementary to  $\angle A$ , then  $\angle B =$ 
  - a)  $25^\circ$
  - b)  $115^\circ$
  - c)  $35^\circ$
  - d)  $55^\circ$
6. Two lines that never meet are called:
  - a) Intersecting lines
  - b) Parallel lines
  - c) Perpendicular lines
  - d) Transversal
7. If a transversal cuts two parallel lines, which angles are equal?
  - a) Alternate interior angles
  - b) Corresponding angles
  - c) Vertically opposite angles
  - d) All of the above
8. The sum of all angles around a point is:
  - a)  $180^\circ$
  - b)  $270^\circ$
  - c)  $360^\circ$
  - d)  $90^\circ$

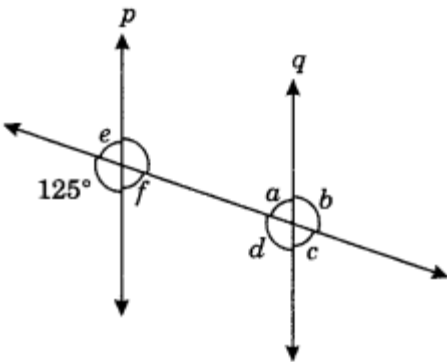
9. Which of the following pairs of angles are always equal?
- Adjacent angles
  - Corresponding angles (when a transversal intersects parallel lines)
  - Linear pair
  - None of these
10. If a transversal cuts two parallel lines, which of these angles are NOT necessarily equal?
- Alternate interior angles
  - Vertically opposite angles
  - Linear pair angles
  - Corresponding angles

**Section B: Long Answer Questions [4 marks each]**

11. Find the value of  $x$  in each of the following figures if  $l \parallel m$ .



12. In the given figure,  $p \parallel q$ . Find the unknown angles.



13. The sum of two angles is  $130^\circ$ , and one angle is twice the other. Find the angles.
14. If two supplementary angles are in the ratio 3:2, find the measure of each angle.
15. Identify which of the following pairs of angles are complementary and which are supplementary.
- A)  $65^\circ, 115^\circ$     B)  $63^\circ, 27^\circ$