

CHAPTER-8 | Playing with Construction

QUIZ
PART-12

1. What is the length of line segment AB?

- A. 3 cm
- B. 4 cm
- C. 7 cm
- D. 10 cm (C)

Explanation: Step (i) says to draw $AB = 7$ cm.

2. At which points are perpendiculars drawn?

- A. C and D
- B. A and B
- C. A and D
- D. B and C (B)

Explanation: Step (ii) says perpendiculars are drawn at A and B.

3. Point D is taken on the perpendicular at A such that $AD =$

- A. 3 cm
- B. 4 cm
- C. 7 cm
- D. 8 cm (B)

Explanation: Step (iii) gives $AD = 4$ cm.

4. Point C is taken on the perpendicular at B such that $BC =$

- A. 2 cm
- B. 3 cm
- C. 4 cm
- D. 7 cm (B)

Explanation: Step (iii) says $BC = 3$ cm.

5. Which side pair is not equal in the figure?

- A. AB and DC
- B. AD and BC
- C. AB and AD
- D. AC and BD (B)

Explanation: The figure has $AD = 4$ cm and $BC = 3$ cm, so they are not equal.

6. Which line is joined in step (iv)?

- A. AC
- B. BD
- C. DC
- D. AB (C)

Explanation: The construction says to join D and C.

7. Which angles are 90° in the figure at first?

- A. $\angle C$ and $\angle D$
- B. $\angle A$ and $\angle B$
- C. All four angles
- D. Only $\angle A$ (B)

Explanation: Since perpendiculars are drawn at A and B, those two angles are right angles.

8. What happens to $\angle C$ and $\angle D$ when opposite sides are unequal?

- A. Both remain 90°
- B. One becomes 180°
- C. Neither is 90°
- D. Both become 45° (C)

Explanation: The chapter concludes that if opposite sides are unequal, then $\angle C$ and $\angle D$ are not 90° .

9. Is it possible to draw a 4-sided figure with all angles 90° but opposite sides unequal?

- A. Yes, always
- B. Yes, sometimes
- C. No
- D. Only on dot paper (C)

Explanation: The conclusion in the chapter is that such a figure is not possible.

10. What is the main idea proved by this construction?

- A. All quadrilaterals are rectangles
- B. A rectangle can have unequal opposite sides
- C. A four-sided figure with four right angles must have equal opposite sides
- D. Only squares have right angles (C)

Explanation: The construction shows that when all four angles are 90° , opposite sides must be equal, as in a rectangle.