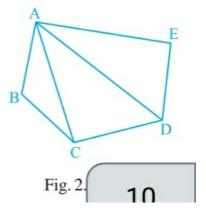
## HOTS QUESTION CHAPTER-4 BASIC GEOMETRICAL IDEAS

1. The number of diagonals of a hexagon is \_\_\_\_\_\_.

2. T/F. Two parallel lines meet at two different points.

Name the vertices and the line segments in Fig. 2.27.



3.

. Write down fifteen angles (less than 180°) involved in Fig.

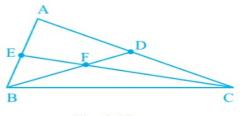


Fig. 2.28

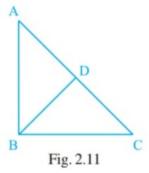
4.

- 5. If the sum of two angles is greater than 180 ° then which of the following is not possible for the two angles?
  - a. One obtuse and one acute angle
  - b. One right and one acute angle
  - c. Two obtuse angles
  - d. Two right angles
- 6. A polygon has prime number of sides, Its number of sides is equal to the sum of the two least consecutive primes. The number of diagonals of the polygon is \_\_\_\_\_\_

. In Fig. 2.11, AB = BC and AD = BD = DC.

The number of isoscles triangles in the figure is

- (A) 1
- (B) 2
- (C) 3
- (D) 4



8.

. In Fig. 2.12,

 $\angle$ BAC = 90° and AD  $\perp$  BC.

The number of right triangles in the figure is

- (A) 1
- (B) 2
- (C) 3
- (D) 4

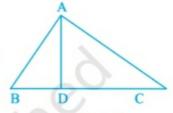


Fig. 2.12