

## Exercise – 5.7

**Q1.** Say True or False:

- (a) Each angle of a rectangle is a right angle.
- (b) The opposite sides of a rectangle are equal in length.
- (c) The diagonals of a square are perpendicular to one another.
- (d) All the sides of a rhombus are of equal length.
- (e) All the sides of a parallelogram are of equal length.
- (f) The opposite sides of a trapezium are parallel.

**Sol.** (a) True  
(b) True  
(c) True  
(d) True  
(e) False  
(f) False

**Q2.** Give reasons for the following:

- (a) A square can be thought of as a special rectangle.
- (b) A rectangle can be thought of as a special parallelogram.
- (c) A square can be thought of as a special rhombus.
- (d) Square, rectangles, parallelograms are all quadrilaterals.
- (e) Square is also a parallelogram.

**Sol.** (a) A square has all the properties as that of a rectangle. So, it is a special rectangle.  
(b) A rectangle has the same properties as that of a parallelogram. So, it is a special parallelogram.  
(c) A square has the same properties as that of a rhombus. So, it is a special rhombus.  
(d) Square, rectangles, and parallelogram are all quadrilaterals as they are all enclosed by four sides.

**Q3.** A figure is said to be regular if its sides are equal in length and angles are equal in measure. Can you identify the regular quadrilateral?

**Sol.** Square is only the regular quadrilateral with equal sides and equal angles.

Therefore, a square is a regular quadrilateral.