



### Exercise 17B

Q1

**Answer :**

(c)  $360^\circ$

The sum of all the angles of a quadrilateral is  $360^\circ$ .

Q2

**Answer :**

(c)  $90^\circ$

The three angles of a quadrilateral are  $80^\circ$ ,  $70^\circ$  and  $120^\circ$ .

Let the fourth angle be  $x$ .

We know that the sum of all the angles of a quadrilateral is  $360^\circ$ .

$$80^\circ + 70^\circ + 120^\circ + x = 360^\circ$$

$$\Rightarrow 270^\circ + x = 360^\circ$$

$$\Rightarrow x = 360^\circ - 270^\circ$$

$$\Rightarrow x = 90^\circ$$

Thus, the fourth angle is  $90^\circ$ .

Q3

**Answer :**

Let the angles of a quadrilateral be  $(3x)^\circ$ ,  $(4x)^\circ$ ,  $(5x)^\circ$  and  $(6x)^\circ$ .

Sum of all the angles of a quadrilateral is  $360^\circ$ .

$$\therefore 3x + 4x + 5x + 6x = 360^\circ$$

$$\Rightarrow 18x = 360^\circ$$

$$\Rightarrow x = \frac{360}{18}$$

$$\Rightarrow x = 20^\circ$$

So,

$$3x = 60^\circ$$

$$4x = 80^\circ$$

$$5x = 100^\circ$$

$$6x = 120^\circ$$

The largest of these angles is  $120^\circ$ .

So, the correct answer is given in option (b).

Q4

**Answer :**

(d) a trapezium

A trapezium is a quadrilateral that has only one pair of parallel sides.

Q5

**Answer :**

(d) a parallelogram

A parallelogram is a quadrilateral whose opposite sides are parallel.

Q6

**Answer :**

(b) equal nonparallel sides

The non-parallel sides of an isosceles trapezium are equal.

Q7

**Answer :**

(b) a rhombus

The diagonals of a rhombus bisect each other at right angle.

Q8

**Answer :**

(b) all sides equal and diagonals equal

In a square, all the sides are equal. All of its diagonals are also equal.

Q9

**Answer :**

(c) kite

A kite has two pairs of equal adjacent sides, but unequal opposite sides.

Q10

**Answer :**

(c) A square

The only regular quadrilateral is a square. This is because all of its sides and angles are equal.

\*\*\*\*\* END \*\*\*\*\*