

Ex - 6.1

Q1. Fill in the blanks using the correct word given in brackets :

- (i) All circles are _____. (congruent, similar)
- (ii) All squares are _____. (similar, congruent)
- (iii) All _____ triangles are similar.
(isosceles, equilateral)
- (iv) Two polygons of the same number of sides are similar, if (a) their corresponding angles are _____ and (b) their corresponding sides are _____. (equal, proportional)

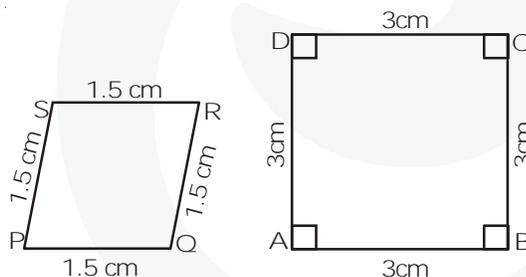
Sol. (i) All circles are similar.
 (ii) All squares are similar.
 (iii) All equilateral triangles are similar.
 (iv) Two polygons of the same number of sides are similar, if (a) their corresponding angles are equal and (b) their corresponding sides are proportional.

Q2. Give two different examples of pair of

- (i) Similar figures.
- (ii) Non-similar figures.

Sol. (i) 1. Pair of equilateral triangles are similar figures.
 2. Pair of squares are similar figures.
 (ii) 1. One equilateral triangle and one isosceles triangle are non-similar.
 2. Square and rectangle are non-similar.

Q3. State whether the following quadrilaterals are similar or not :



Sol. The two quadrilateral in figure are not similar because their corresponding angles are not equal.