RD SHARMA

Solutions

Class 10 Maths

Chapter 4

Ex 4.1

Q.1) Fill in the blanks using the correct word given in brackets:

(1.) All circles are _____ (congruent, similar)

(2.) All squares are _____ (similar, congruent)

(3.) All _____ triangles are similar (isosceles, equilaterals)

(4.) Two triangles are similar, if their corresponding angles are _____ (proportional, equal)

(5.) Two triangles are similar, if their corresponding sides are _____ (proportional, equal)

(6.) Two polygons of the same number of sides are similar, if (a) _____their corresponding angles are and (b) _____ their corresponding sides are (equal, proportional)

Q.2) Write the truth value (T/F) of each of the following statements:

(1.) Any two similar figures are congruent.

(2.) Any two congruent figures are similar.

(3.) Two polygons are similar, if their sides are proportional.

(4.) Two polygons are similar, if their corresponding sides are proportional.

(5.) Two triangles are similar if their corresponding sides are proportional.

(6.) Two triangles are similar if their corresponding angles are proportional.

Sol.1:

(1) Similar

(2) Similar

(3) Equilateral

(4) Equal

(5) Proportional

(6) a.) Equal, b.) Proportional.

Soln.2:

(1) False

(2) True

(3) False

(4) False

(5) True

(6) True