

Triangles Formative Assignments-2

Fill in the blanks Questions

Let ABC and PQR are two triangles such that

$$ABC \cong PQR$$

- Side AC is congruent to
- Angle A is congruent to Angle
- Triangle ABC is To Triangle ABC
- Side to equal to side QR
- The sum of the angles of A+B+C is equal to
- If $ABC \cong XYZ$, Then PQR is to XYZ
- If angle A is 60° and angle B is 30° then angle R is
- Angle P and Q in above cases would be and

Solution

- PR
- P
- Congruence
- BC
- 180°
- Congruent
- 90°
- 60° and 30°

True or False statement

2) True or False statement

- a) A triangle can be constructed only when the sum of any two sides is greater than the third side
- b) The median of the equilateral triangle are unequal
- c) In the right angle triangle having sides 5, 4, 3. The side having 5 is the hypotenuse
- d) In a triangle, the greater angle has the larger side opposite to it
- e) The sum of all the angles in a triangle is 180
- f) If $ABC \cong PQR$ then $AC=PR$

- g) For an obtuse angled triangle, the circumcenter lies outside the triangle

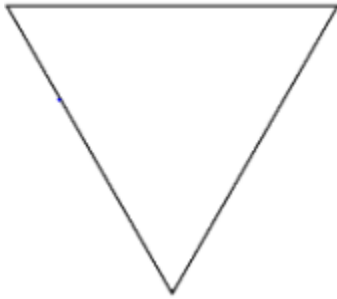
- h) AAA is the right condition for congruency
- i) Each Angle of the equilateral triangle is 60
- j) A triangle can have two right angles
- k) A triangle can have all the angles greater than 60
- L) A triangle cannot have all the angles less than 60

Solution

- a) True
- b) False
- c) True
- d) true
- e) True
- f) True
- g) True
- h) True
- i) True
- j) False
- k) False
- l) True

Multiple choice Questions

- 4) All of the sides of this triangle are equal. What kind of a triangle is this?



- a) Scalene
- B) Equilateral
- c) Isosceles
- d) Right triangle

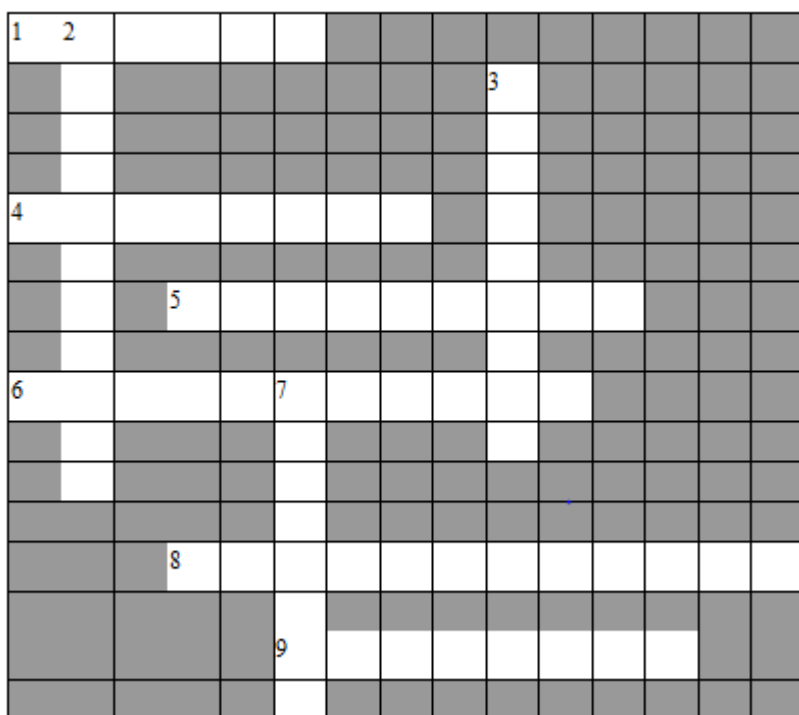
Solution (b)

5. Which are these are valid for two triangles to be congruent?

- a) AAA
- b) SSS
- c) AAS
- d) SSA

Solution
(b) and (c)

Crossword Puzzle



ACROSS

1. A line Segment joining the corner of the triangle to the mid point of the opposite side of the triangle
4. A line Segment from the corner of the triangle and perpendicular to the opposite side of the triangle
5. Two triangle whose all sides are equal are called
6. Point of intersection of the three altitude of the triangle
8. The perpendicular bisector of the sides of the triangles passes through same point
9. All the angle bisector of the triangle passes through same point

DOWN

2. triangle whose all sides are equal
3. A triangle whose two sides are equal
7. Point of intersection of the three median of the triangle is called the centroid of the triangle

Solution:

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Orthocenter	Point of intersection of the three altitude of the triangle
Equilateral	triangle whose all sides are equal
Median	A line Segment joining the corner of the triangle to the midpoint of the opposite side of the triangle
Altitude	A line Segment from the corner of the triangle and perpendicular to the opposite side of the triangle
Isosceles	A triangle whose two sides are equal
Congruent	Two triangle whose all sides are equal are called
Centroid	Point of intersection of the three median of the triangle is called the centroid of the triangle
In center	All the angle bisector of the triangle passes through same point
Circumcenter	The perpendicular bisector of the sides of the triangles passes through same point