7. The enrolment in a school during six consecutive years was as follows:

1555, 1670, 1750, 2013, 2540, 2820

Find the mean enrolment of the school for this period.

8. The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

Day	**Mon**	**Tue**	**Wed**	**Thurs**	**Fri**	**Sat**	**Sun**
Rainfall (in mm)	0.0	12.2	2.1	0.0	20.5	5.5	1.0

(i) Find the range of the rainfall in the above data.

(ii) Find the mean rainfall for the week.

(iii) On how many days was the rainfall less than the mean rainfall.

Example 8: In Fig. 6.4, $\angle PRS = \angle QPR + \angle$ _____

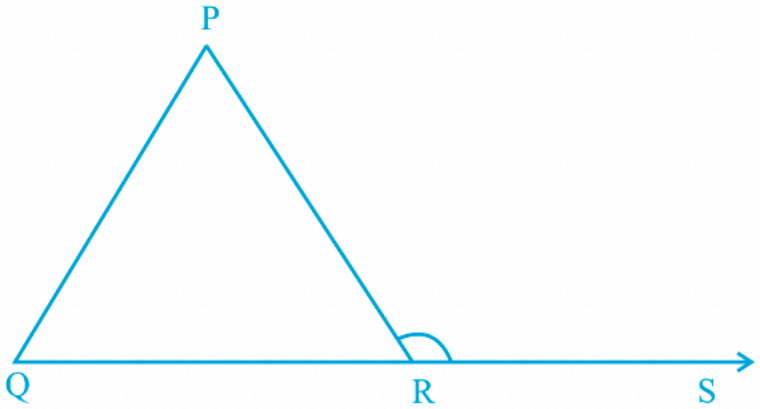

Fig. 6.4

3. In Fig. 6.7, PQ = PS. The value of x is

(a) 35° (b) 45°
(c) 55° (d) 70°

4. In a right-angled triangle, the angles other than the right angle are

(a) obtuse (b) right
(c) acute (d) straight

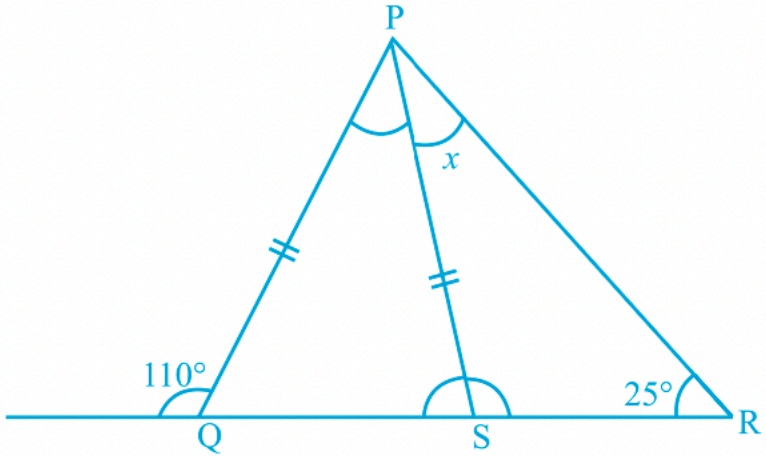

Fig. 6.7

5. In an isosceles triangle, one angle is 70°. The other two angles are of

(i) 55° and 55° (ii) 70° and 40° (iii) any measure

7. Lengths of sides of a triangle are 3 cm, 4 cm and 5 cm. The triangle is

(a) Obtuse angled triangle (b) Acute-angled triangle

(c) Right-angled triangle (d) An Isosceles right triangle

8. In Fig. 6.8, PB = PD. The value of x is

(a) 85° (b) 90°

(c) 25° (d) 35°

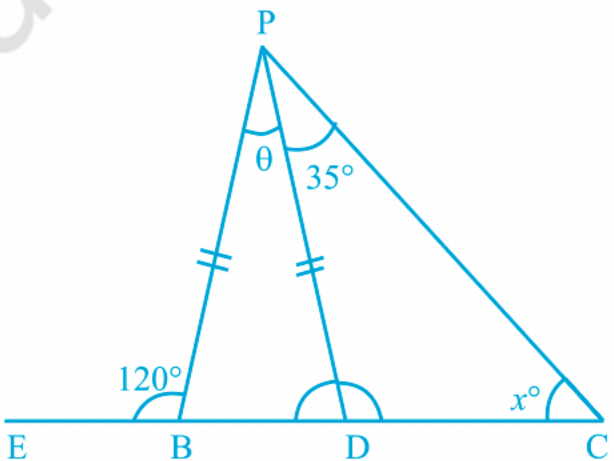

Fig. 6.8

9. In ΔPQR,

(a) PQ – QR > PR

(b) PQ + QR < PR

(c) PQ – QR< PR

(d) PQ + PR< QR

10. In Δ ABC,

(a) AB + BC > AC (b) AB + BC < AC

(c) AB + AC < BC (d) AC + BC < AB

16. The perimeter of the rectangle whose length is 60 cm and a diagonal is 61 cm is

(a) 120 cm (b) 122 cm (c) 71 cm (d) 142 cm

17. In ΔPQR, if $PQ = QR$ and $\angle Q = 100°$, then $\angle R$ is equal to

(a) 40° (b) 80° (c) 120° (d) 50°

In questions 50 to 69, fill in the blanks to make the statements true.

50. The _____ triangle always has altitude outside itself.

51. The sum of an exterior angle of a triangle and its adjacent angle is always _____.

52. The longest side of a right angled triangle is called its _____.

53. Median is also called _____ in an equilateral triangle.

54. Measures of each of the angles of an equilateral triangle is _____.

55. In an isosceles triangle, two angles are always _____.

56. In an isosceles triangle, angles opposite to equal sides are _____.

57. If one angle of a triangle is equal to the sum of other two, then the measure of that angle is _____.

58. Every triangle has at least _____ acute angle (s).

59. Two line segments are congruent, if they are of _____ lengths.

60. Two angles are said to be _____, if they have equal measures.

61. Two rectangles are congruent, if they have same _____ and _____.