

Important points to remember:

- If a line is drawn from another line, then the sum of the angles on either side is 180 degree.
- Among the four angles made by two lines cutting across each other, the sum of each pair of nearby angles is 180 degree. Each pair of opposite angles are equal.

Choose the correct answer from the options given below:

1. The measure of a right angle is ----- degree

A. 90

B. 60

C. 30

2. In a right angled triangle, if one angle is 35 degree, the measure of third angle is -----

A. 125

B. 55

C. 90

3. The sum of three angles of a triangle is ----- degree

A. 90

B. 180

C. 360

4. Vertically opposite angles are always -----

A. Equal

B. Unequal

C. 90 degree

5. The angles in a linear pair are -----

A. Complementary

B. Supplementary

C. Equal

ANSWERS:

1. 90

2. $180 - (90 + 35) = 180 - 125 = 55$

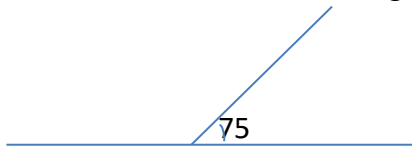
3. 180

4. Equal

5. Supplementary (Sum of the measures of two angles is 180 degree)

Answer the following:

6. Find the measure of the unknown angles.

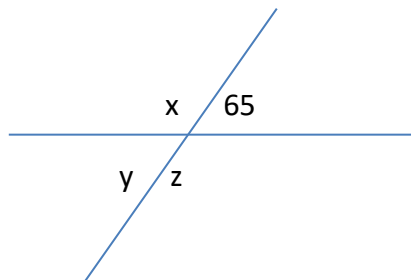


Solution:

Let the unknown angle be x .

Then $x = 180 - 75 = 105$ (forms a linear pair)

7. Find the measure of unknown angles x , y and z .



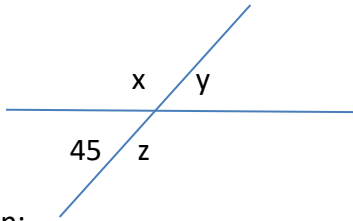
Solution:

$x = 180 - 65 = 115$ (linear pair)

$y = 65$ (Vertically opposite angles)

$z = 115$ (Vertically opposite angles)

8. Find the measure of unknown angles x , y and z



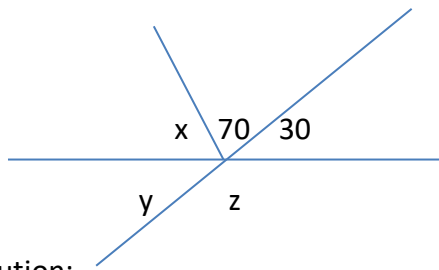
Solution:

$$z = 180 - 45 = 135 \text{ (linear pair)}$$

$$y = 45 \text{ (Vertically opposite angles)}$$

$$x = 135 \text{ (Vertically opposite angles)}$$

9. Find the measure of unknown angles x , y , z



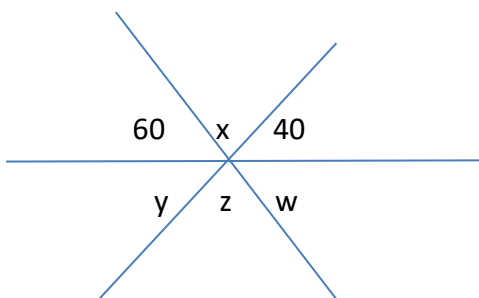
Solution:

$$x = 180 - (70 + 30) = 180 - 100 = 80 \text{ (linear pair)}$$

$$y = 30 \text{ (Vertically opposite angles)}$$

$$z = 180 - 30 = 150 \text{ (linear pair)}$$

10. Find the measure of unknown angles x , y , z and w



Solution:

$$x = 180 - (60 + 40) = 180 - 100 = 80 \text{ (linear pair)}$$

$$z = 80 \text{ (Vertically opposite angles)}$$

$$y = 40 \text{ (Vertically opposite angles)}$$

$w = 60$ (Vertically opposite angles).