

Exercise 4A

Question 1:

- (i) Angle: Two rays having a common end point form an angle.
- (ii) Interior of an angle: The interior of $\angle AOB$ is the set of all points in its plane, which lie on the same side of OA as B and also on same side of OB as A.
- (iii) Obtuse angle: An angle whose measure is more than 90° but less than 180°, is called an obtuse angle.
- (iv) Reflex angle: An angle whose measure is more than 180° but less than 360° is called a reflex angle.
- (v) Complementary angles: Two angles are said to be complementary, if the sum of their measures is 90°.
- (vi) Supplementary angles: Two angles are said to be supplementary, if the sum of their measures is 180°.

Question 2:

$$\angle A = 36^{\circ} \ 27' \ 46'' \ \text{and } \angle B = 28^{\circ} \ 43' \ 39''$$

 $\therefore \ \text{Their sum} = (36^{\circ} \ 27' \ 46'') + (28^{\circ} \ 43' \ 39'')$
 $Deg \quad \text{Min} \quad \text{Sec}$
 $36^{\circ} \quad 27' \quad 46''$
 $+ \ 28^{\circ} \quad 43' \quad 39''$ [1° = 60'; 1' = 60'']
 $65^{\circ} \quad 11' \quad 25''$

Therefore, the sum $\angle A + \angle B = 65^{\circ} 11' 25''$

Question 3:

Let
$$\angle A = 36^{\circ}$$
 and $\angle B = 24^{\circ} 28' 30''$
Their difference = 36° - $24^{\circ} 28' 30''$

Thus the difference between two angles is $\angle A - \angle B = 11^{\circ} 31' 30''$

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