$$\rightarrow \angle AOB$$
$$= \angle BOA$$
$$= \angle O$$

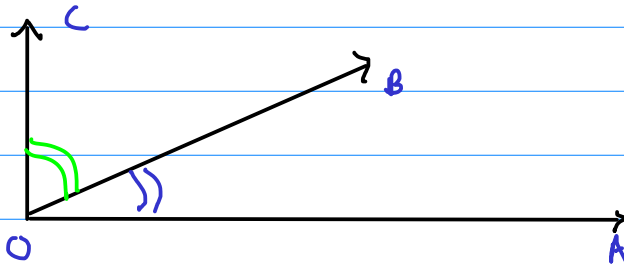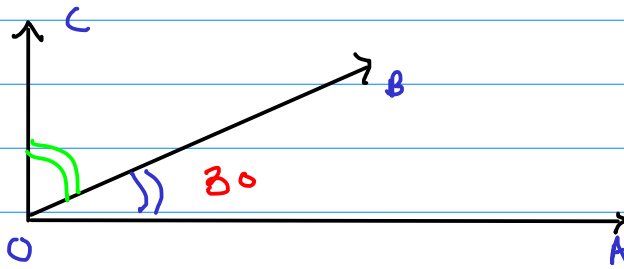## Angles

- right angle :- angle having 90°
- straigh angle :- angle having 180°

Complementary :-

$$\angle AOB + \angle BOC = 90°$$

So the complementary angle of $\angle AOB$ is $\angle BOC$.

What $\angle BOC$?

$$60°, = 90° - 30°$$

30

Q. If two angles are complementary to each other and one angle is 25°. Find the other angle.

Ans :- Let the measure of other angle be x.

$$So \quad x + 25 = 90°$$

$$So \quad x = 90° - 25°$$
$$= 65°$$

Q. If two angles are complementary to each other and one angle is 40°. Find the other angle.

8. If two angles are complementary to each other and one angle is 45°. Find the other angle.

↳ Ans :- Let the measure of other angle be x.

So $x + 40° = 90°$

So $x = 90° - 40°$
$= 50°$

8. If two angles are complementary to each other and one angle is 45°. Find the other angle.

Ans :- Let the measure of other angle be x.

So $x + 45° = 90°$

So $x = 90° - 45°$
$= 45°$

C < S $(90 < 180°)$

Supplementary :-   Sum of the two angles is 180°
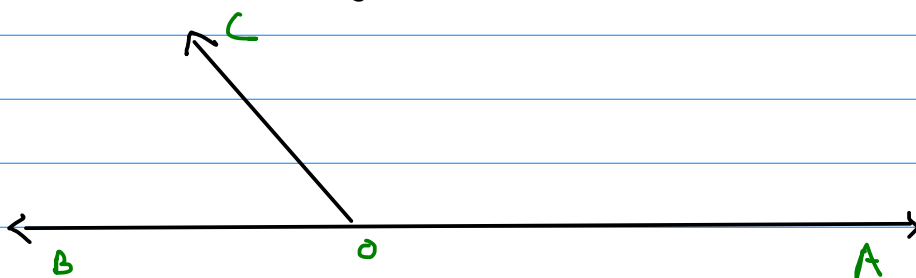
∠AOB = 180°

∠AOC + ∠BOC = 180°

So the supplementary angle of ∠AOC is ∠BOC.

Q. If two angles are supplementary to each other and one angle is 40°. Find the other angle.

Q. If two angles are supplementary to each other and one angle is 45°. Find the other angle.

Q. If two angles are supplementary to each other and one angle is 40°. Find the other angle.

Ans :- Let the measure of other angle be X.

So X + 40° = 180°

So X = 180° - 40°

= 140°

Q. If two angles are supplementary to each other and one angle is 45°. Find the other angle.

Ans :- Let the measure of other angle be X.

So X + 45° = 180°

So X = 180° - 45°

= 135°

9. If the angle is complementary of itself. Find the measure of angle
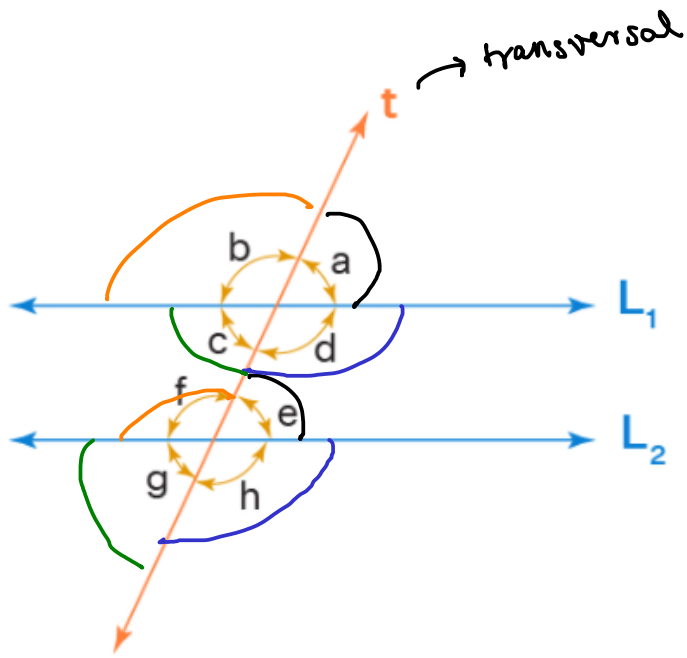
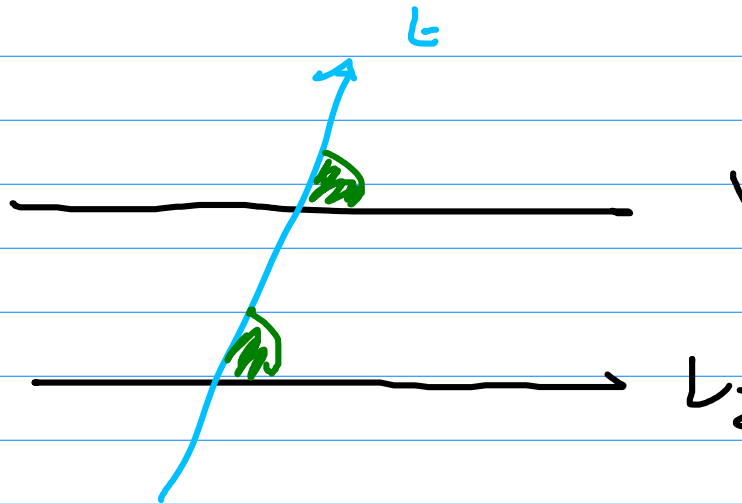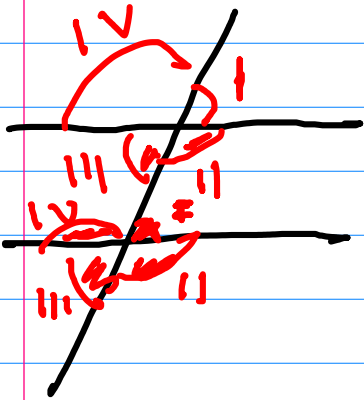Let x be the measure of the angle

$$x + x = 90°$$
$$= 2x = 90$$
$$\Rightarrow x = \frac{90}{2} = 45°$$

a

b

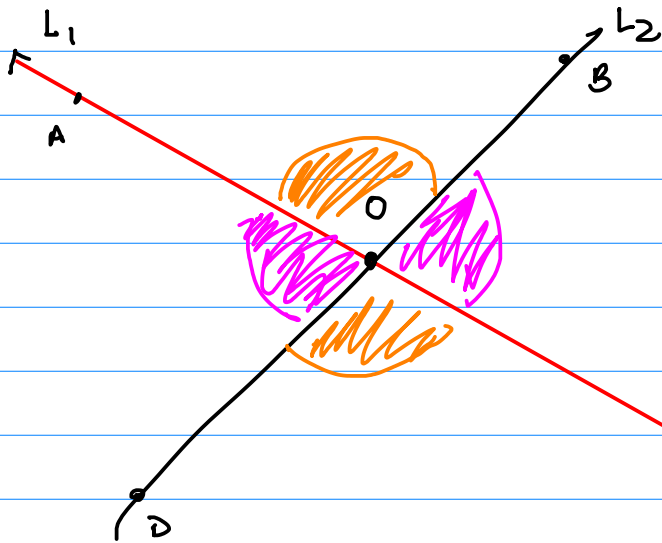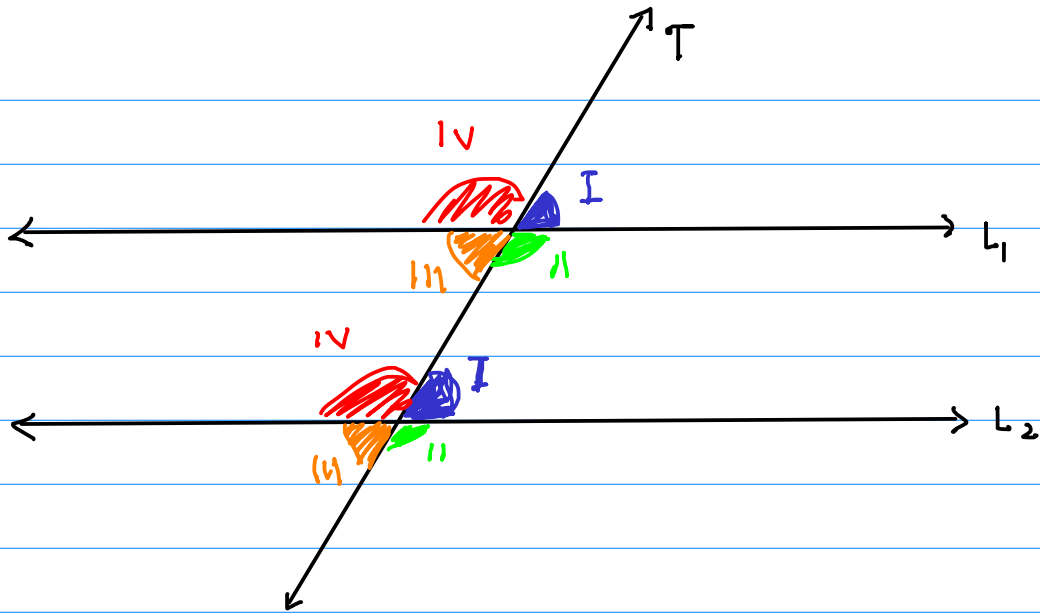- They never intersect

- And are equal distance apart

→ transversal

t

L₁

L₂

$\angle a = \angle e$

t

L₁

L₂

IV
I
III
II
L_1

T

IV
I
II
II
L_2

L_1
A
O
B
L_2

$\angle AOB = \angle COD$

Show that $\angle AOD = \angle BOC$.

$\rightarrow$ $180 - \angle AOB = 180 - \angle COD$

$\angle AOD = \angle BOC$.

C
D

135°
135°
135°
135°
130°
135°
45°
O