

# Lines & Angles Questions for CDS, SSC & Railways Exams

# Lines & Angles Quiz 1

Directions: Kindly study the following questions carefully and choose the right answer:

1. An angle which is greater than 180° but less than 360° is called:												
A. An actue angle	B. An obtus	e angle	C. An adjacent angle	D. A reflex angle								
2. The complement of 72° 40' is:												
A. 107° 20′	B. 27° 20′	C. 17° 20′	D. 12° 40′									
3. The supplement of 154° 30' is:												
A. 25° 30′	B. 44° 45′	C. 158° 45′	D. 168° 30'									
4. Two straight lines AB and CD cut each other at O. If $\angle$ BOD = 63°, then $\angle$ BOC is:												
A. 63°	B. 117°	C. 17°	D. 153°									
5. Th <mark>e straight</mark> lines AD and BC intersect one another at the point O.												
If $\angle AOB + \angle BOD + \angle DOC = 274^\circ$ , then $\angle AOC$ is:												
A. 86°	B. 90°	C. 94°	D. 137°									
6. In the given figure, AOB is a straight line. If $\angle AOC + \angle BOD = 85^\circ$ , then $\angle COD$ is:												
A. 85°	x /0											
B. 90°												
C. 95°												
D. 100°												
7. In the given figure, if AOB is a straight line, then the value of x is:												
A. 90°	∑° ∕°											
B. 45° •	$X + 15^{\circ}$ $45^{\circ}$ $X + 30^{\circ}$ A O B	•										



D. 150°

8. In the given figure, the value of x, that would make POQ a straight line, is:



B. 44°

X° 80°

D. 33°

C. 34°

9. If two angles are complementary of each other, then each angle is:



**Correct Answers:** 

1	2	3	4	5	6	7	8	9	10
D	С	А	В	А	С	В	С	С	D

#### **Explanations:**

1.

An angle which is greater than 180° but less than 360° is called a reflex angle.

Hence, option D is correct.

# 2.

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Complement of 72° 40' is 90° – (72° 40')
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= (89° 60') - (72° 40') {since 1° = 60'}

= 17° 20′

Hence, option C is correct.

3.

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Supplement of 154° 30' is 180° – (154° 30')

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= (179^{\circ} 30') - (154^{\circ} 30') \{ \text{since } 1^{\circ} = 60' \}
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= 25° 30'.

Hence, option A is correct.

### 4.

As given  $\angle BOD = 63^{\circ}$ 

Since COD is a straight line, we have:



 $\angle BOC + \angle BOD = 180^{\circ}$ . So,  $\angle BOC = (180^{\circ} - 63^{\circ}) = 117^{\circ}$ .

Hence, option B is correct.

#### 5.

As we know that the sum of all the angles around a point is 360°.



 $\therefore$  274° +  $\angle$ AOC = 360° or  $\angle$ AOC = 86°.

Hence, option A is correct.

# 6.

Clearly,

 $\angle AOC + \angle COD + \angle BOD = 180^{\circ}$ 

∴ 85° + ∠COD = 180°. So, ∠COD = (180° – 85°) = 95°.

#### Hence, option C is correct.

# 7.

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As, (x + 30°) + 45° + (x + 15°) = 180°
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⇒ x = 45<mark>°.</mark>

Hence, option B is correct.

# 8.

POQ will be a straight line,

If 80° + 66° + x = 180°, i.e. x = 34°.

Hence, option C is correct.

# 9.

If two angles are complementary, then clearly each angle is less than 90° and is therefore an acute angle.

Hence, option C is correct.



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# 10.

As per the given figure,

 $\angle BFE = \angle CEF = 110^{\circ}$  (alt.  $\angle s$ ).

So,  $\angle XFE = \angle BFE - \angle BFX = (110^\circ - 50^\circ) = 60^\circ$ .

And on straight line CD,

 $110^{\circ} + \angle FEX + 30^{\circ} = 180^{\circ} \Rightarrow \angle FEX = 40^{\circ}.$ 

Now,  $\angle XFE + \angle FEX + \angle FXE = 180^{\circ} \Rightarrow 60^{\circ} + 40^{\circ} + \angle FXE = 180^{\circ}$ .

 $\therefore \angle FXE = 80^{\circ}.$ 

Hence, option D is correct.

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