

# Aptitude - Co-ordinate Geometry Online Quiz

Following quiz provides Multiple Choice Questions (MCQs) related to **Co-ordinate Geometry**. You will have to read all the given answers and click over the correct answer. If you are not sure about the answer then you can check the answer using **Show Answer** button. You can use **Next Quiz** button to check new set of questions in the quiz.



**Q 1 - On which pivot does the point (6, 0) lies?**

A - x-pivot

B - y-hub

C - xy-pivot

D - none of these

**Answer : A**

**Explanation**

The point lies on (6, 0) lies on x-axis.

Hide Answer

**Q 2 - The separation of the point p (8, - 6) from the beginning is:**

A - 2 units

B - 14 units

C - 10 units

D - none of these

**Answer : C**

**Explanation**

$$Op = \sqrt{(8-0)^2 + (-6-0)^2} = \sqrt{64 + 36} = \sqrt{100} = 10 \text{ unit}$$

Show Answer

**Q 3 - The focuses A (0,6),B(- 5,3) and C(3,1) are the vertices of a triangle which is:**

A - Isosceles

B - equilateral

C - scalene

D - right calculated

**Answer : A**

**Explanation**

$$AB^2 = (-5-0)^2 + (3-6)^2 = (-5)^2 + (-3)^2 = (25+9) = 34$$

$$BC^2 = (3+5)^2 + (1-3)^2 = (8)^2 + (-2)^2 = 64+4 = 68$$

$$AC^2 = (3-0)^2 + (1-6)^2 = (3)^2 + (-5)^2 = 9+25 = 34$$

$\therefore AB = AC$ . Hence,  $\Delta ABC$  is isosceles.

Show Answer

**Q 4 - The vertices of a quadrilateral ABCD are A(0,0) ,B(4,4) ,C(4,8) and D(0,4).Then ABCD is a**

A - A square

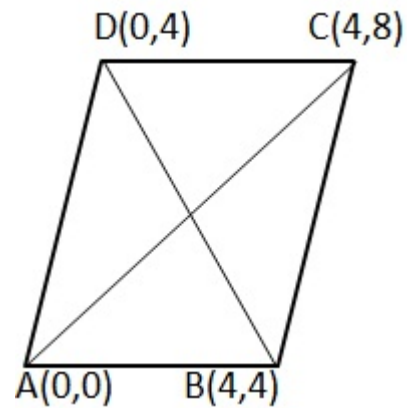
B - a rhombus

C - a rectangle

D - none of these

**Answer : D**

**Explanation**



$$AB^2 = (4-0)^2 + (4-0)^2 = 32$$

$$BC^2 = (4-4)^2 + (8-4)^2 = 0+16 = 16$$

$$CD^2 = (0-4)^2 + (4-8)^2 = (16+16) = 32$$

$$AB = CD = \sqrt{32} = 4\sqrt{2}, \quad BC = AD = \sqrt{16} = 4$$

$$AC^2 = (4-0)^2 + (8-0)^2 = (16+64) = 80$$

$$BD^2 = (0-4)^2 + (4-4)^2 = 16+0 = 16$$

$\therefore \text{Diag} = AC \neq \text{Diag } BD.$

$\therefore ABCD$  is a parallelogram.

Hide Answer

**Q 5 - In the event that the focuses A (2, 3), B (5,  $h$ ) and C (6, 7) are collinear, then  $h$ =?**

A - 4

B - 6

C - - 3/2

D - 11/4

**Answer : B****Explanation**

Here  $x_1=2$ ,  $x_2= 5$ ,  $x_3 = 6$ ,  $y_1 =3$ ,  $y_2= h$  and  $y_3 = 7$

$$\Delta = \frac{1}{2} [x_1(y_2-y_3) + x_2(y_3-y_1) + x_3(y_1-y_2)]$$

$$\Rightarrow \frac{1}{2} [2(h-7) + 5(7-3) + 6(3-h)] = 0 \Rightarrow 4h = 24 \Rightarrow h=6$$

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**Q 6 - Two vertices of a  $\Delta ABC$  are B (- 3, 1) and C (0, - 2) and its centroid is at the inception. The Third vertex A is:**

A - (3, 1)

B - (2, 3)

C - (- 1, 2)

D - (- 2, 3)

**Answer : A**

**Explanation**

Let the vertex A be (a, b). Then,  
 $\frac{1}{3}(-3+0+a) = 0$  and  $\frac{1}{3}(1-2+b) = 0$   
 $= -3 + a = 0$  and  $-1 + b = 0 \Rightarrow a = 3$  and  $b = 1$   
 $\therefore$  Vertex A is A (3, 1)

Hide Answer

**Q 7 - x-pivot partitions the join of A (2, 3) and B (5, 6) in the proportion**

A - 1:2

B - 2:1

C - 3:5

D - 2:3

**Answer : A**

**Explanation**

Let the required ratio be  $h:1$ . Then, its co- ordinates are  $(\frac{5h+2}{h+1}, \frac{6h-3}{h+1})$   
But, it lies on x-axis. So, its ordinate is 0.

$\therefore 6h-3/h+1=0 \Rightarrow 6h-3=0 \Rightarrow h=1/2$   
Required ratio is  $1/2:1$  i.e.,  $1:2$

[Hide Answer](#)

**Q 8 - A line goes through the focuses A (- 2, 3) and B (- 6, 5). The slop of line AB is**

A - - 1/2

B - 1/2

C - 3/4

D - -1

**Answer : A**

**Explanation**

$$\text{Slop} = (y_1 - y_2) / (x_1 - x_2) = (5-3) / (-6+2) = 2 / -4 = -1/2$$

[Show Answer](#)

**Q 9 - The mathematical statement of a line going through the focuses A(- 1,1) and B(2,- 4) is:**

A -  $3x+5y+2=0$

B -  $5x+3y+2=0$

C -  $2x+3y+5=0$

D - none of these

**Answer : B**

**Explanation**

The equation of the line is  $(y-y_1)/(x-x_1) = (y_2-y_1)/(x_2-x_1)$   
i.e.,  $(y-1)/(x+1) = -4-1/2+1 \Rightarrow (y-1)/(x+1) = -5/3$   
 $\Rightarrow 3y-3 = -5x-5 \Rightarrow 5x+3y+2 = 0$

Hide Answer

**Q 10 - The lines  $x+2y-9=0$  and  $3x+6y+8=0$  are commonly.**

A - Parallel

B - opposite

C - equal

D - none of these

**Answer : A**



## Explanation

$$x+2y-9=0 \Rightarrow 2y = -x+9 \Rightarrow y = -x/2+9/2$$

$$3x+6y+8=0 \Rightarrow 6y = -3x-8 \Rightarrow y = -x/2 -4/3$$

$$\therefore m_1 : m_2 = -1/2$$

Hence, the given lines are parallel.

[Hide Answer](#)