# The City Prhool <br> Past Paper Questions <br> (Graphs of Linear Equations) <br> MATHEMATICS <br> Class 8 

## Fill in the blanks.

1. The solution of simultaneous linear equations lies at the point of $\qquad$ of their graph.
2. The graph $y=-5$ is parallel to $\qquad$ —.
3. The line $2 y=2 x+4$ cuts the $y$-axis at $\qquad$ .
4. The gradient of the line $y=\frac{-4}{3} x+5$ is $\qquad$ -.
05 . Write the equation representing a straight line parallel to the $y$-axis. $\qquad$ .
5. The graph $\mathrm{y}=-2$ is parallel to $\qquad$ —.
6. Gradient of the line $3 y=4 x-2$ is $\qquad$ .

## Encircle the correct option.

01 . The $y$-intercept of the line $y=2 x+5$ is $\qquad$ .
A) 5
B) 2
C) -5
02. The graph of the equation $y=m x+c$
A) passes through the origin
$B)$ is parallel to the $x-a x i s C)$ cuts the $y-a x i s$ at the point $(0, c)$
03. Identify the point which lies on the line $y=6$
A) $(6,2)$ B) $(2,6)$ C) $(-2,0)$
04. The gradient of the line $3 x-3 y=21$ is
A) 7
B) 1
C) 3

05 . The equation of the line on which these points lie $(5,-1),(5,0),(5,1)$
A) $x=5$
B) $y=5$
C) $x=1$

## Questions

Q no 01) Solve the simultaneous linear equations graphically.

| $x+y=6$ |  |  |  |  | $x-y=-4$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | -1 | 1 | 2 | 3 | X | -1 | 1 | 2 | 3 |
| Y |  |  |  |  | Y |  |  |  |  |

Q no 02) Solve the following simultaneous equations using the graphical method

$$
5 x-4 y=40 ; x+4 y=-16
$$

I. On the axes, draw the graph of $4 y-x=6$
II. Complete the table below:

| X | -2 | 0 | 2 | 6 |
| :--- | :--- | :--- | :--- | :--- |
| Y |  |  |  |  |

III. Use your graph to find the value of $x$ when $y=2.5$

Q no 03) Draw the graphs of the equations on the same set of axes.
I. Copy and complete the following table

$$
3 x-y=5 ; x+y=-1
$$

| $3 \mathrm{x}-\mathrm{y}=5$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| X | -1 | 1 | 3 | -3 |
| Y |  |  |  |  |


| $\mathrm{x}+\mathrm{y}=-1$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| X | -1 | 0 | 1 | 3 |
| Y |  |  |  |  |

II. Draw the graphs of the equations $3 x-y=5$ and $x+y=1$
III. Write down the coordinates of the point of intersection of two graphs.

Q no 04)
I. On the axes, draw the graph of $y=2 x-1$
II. Complete the table below:

| X | -1 | 0 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: |
| Y |  |  |  |  |

III. Use your graph to find the value of $x$ when $y=7$

Q no 05) Draw the graphs of the equations on the same set of axes.
I. Copy and complete the following table

$$
2 x+y=8 ; 5 x-y=6
$$

| $2 \mathrm{x}+\mathrm{y}=8$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| X |  |  |  |  |
| Y |  |  |  |  |


| $5 x-y=6$ |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- |
| $X$ |  |  |  |  |
| $Y$ |  |  |  |  |

II. Draw the graphs of the equations $2 x+y=8$ and $5 x-y=6$
III. Write down the coordinates of the point of intersection of two graphs.

