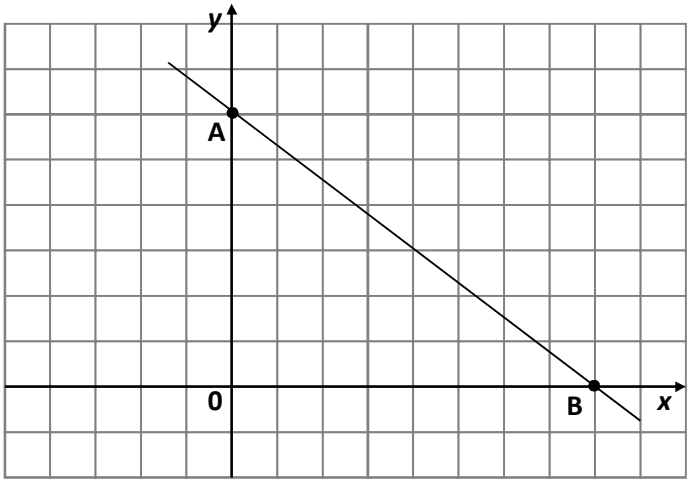
Straight Line (Exam Type Questions)

1. A straight line has the equation $3x - 2y = -4$.
Find the gradient and y-intercept of the line.

2. The line AB passes through the points (0, 6) and (8, 0) as shown in the diagram.



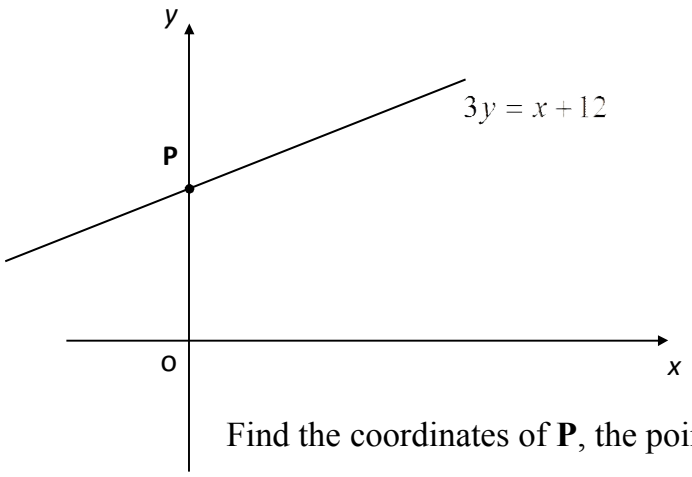
Find the equation of the line AB.

3. A straight line has equation $2y + 3x = 8$. Which line of these gives its gradient and y – intercept? Show working to explain your answer.

A. 3 and (0, 8) **B.** – 3 and (0. 8)
C. $\frac{3}{2}$ and (0, 4) **D.** $-\frac{3}{2}$ and (0, 4)

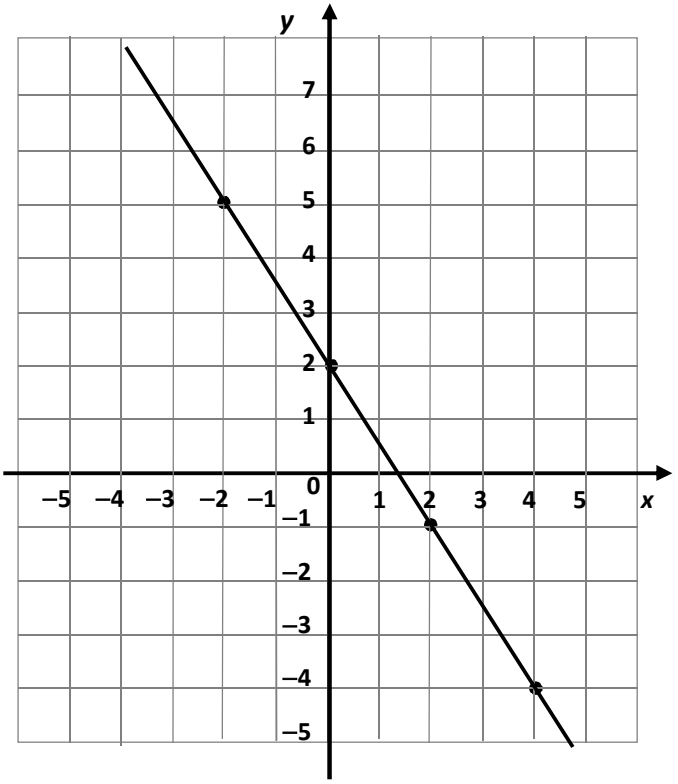
4. Find the gradient and y – intercept of the straight line with equation
$3x - 4y = 12$.

5. The diagram below shows the line with equation $3y = x + 12$.



Find the coordinates of **P**, the point where the line cuts the y-axis.

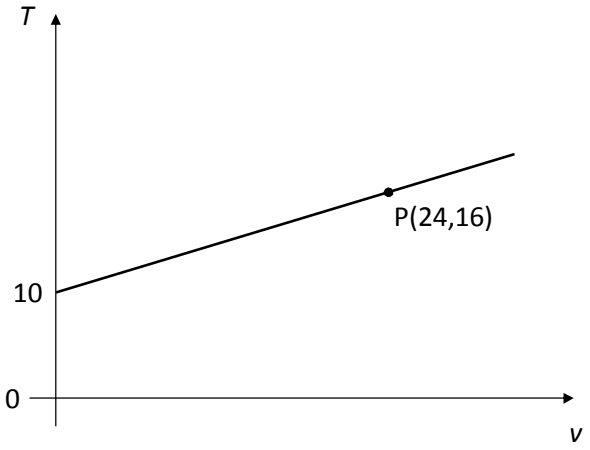
6. Find the equation of the line shown in the diagram below.



7. A line has equation $2y + 6x = 9$. Find its gradient and y - intercept**.**

8. A line has equation $3y + 4x = 15$. Make a sketch of this line on plain paper showing clearly where it crosses the y - axis.

9. The relationship between variables v and T produces a straight line graph as shown below. The line passes through the point P(24,16) as shown.



(a) Find the gradient of the line.

(b) Hence, write down the equation of the line in terms of v and T.