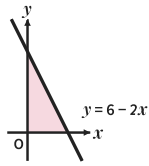


Straight line graphs and area

1

Find the area of the triangle that $y = 6 - 2x$ makes with the axes.



crosses the y axis at $y = 6$

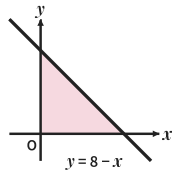
crosses the x axis at $x = 3$

area $\frac{1}{2} \times \square \times \square = \square$

Answer _____

2

Find the area of the triangle that $y = 8 - x$ makes with the axes.



crosses the y axis at $y = 8$

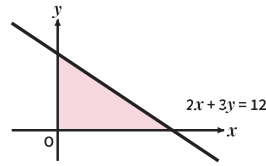
crosses the x axis at $x = \square$

area $\frac{1}{2} \times \square \times \square = \square$

Answer _____

3

Find the area of the triangle that $2x + 3y = 12$ makes with the axes.



crosses the y axis at $y = \square$

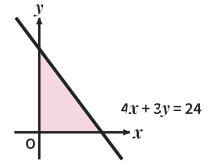
crosses the x axis at $x = \square$

area $\frac{1}{2} \times \square \times \square = \square$

Answer _____

4

Find the area of the triangle that $4x + 3y = 24$ makes with the axes.

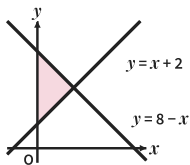


area $\frac{1}{2} \times \square \times \square = \square$

Answer _____

5

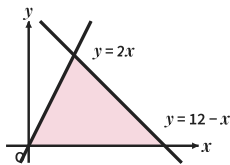
Find the area of the triangle enclosed by $y = x + 2$, $y = 8 - x$ and the y axis.



Answer _____

6

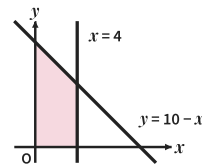
Find the area of the triangle enclosed by $y = 2x$, $y = 12 - x$ and the x axis.



Answer _____

7

Find the area of the trapezium enclosed by $y = 10 - x$, the line $x = 4$ and the two axes.



Answer _____

8

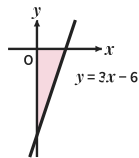
A line has gradient -2 and passes through $(1, 6)$. Find the area of the triangle it makes with the axes.

Answer _____

Straight line graphs and area *further practice*

9

Find the area of the triangle that $y = 3x - 6$ makes with the axes.



Answer _____

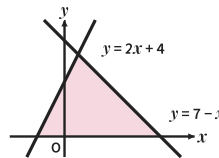
10

Find the area of the triangle that $x + 2y = 10$ makes with the axes.

Answer _____

11

Find the area of the triangle enclosed by $y = 2x + 4$, $y = 7 - x$ and the x axis.



Answer _____

12

The line $y = kx + 12$, where k is negative, makes a triangle of area 36 with the axes. Find k .

Answer _____

13

Find the area of the triangle enclosed by $y = x$, $y = 3x$ and $y = 6$.

Answer _____

14

Find the area of the triangle enclosed by $y = 9 - x$, $y = 3$ and the y axis.

Answer _____

15

The lines $y = x + 1$ and $y = 5 - x$ cross at P. Find P, and the area of the triangle P makes with the points where the lines cross the x axis.

Answer _____

16

Sam says $3x + 2y = 12$ makes a triangle of area $\frac{1}{2} \times 3 \times 2 = 3$ with the axes. Explain his mistake and find the area.

Answer _____