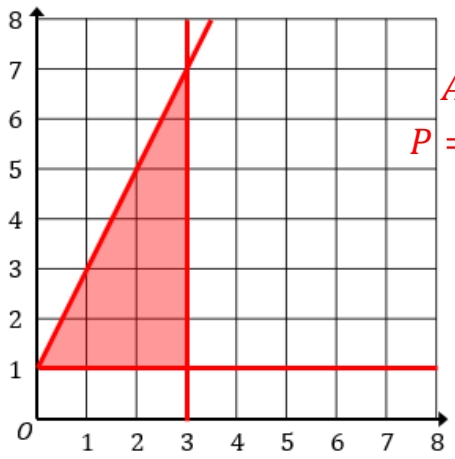
Straight Lines, Areas and Perimeters

Plot each set of three straight lines to form a triangle. Find the area and perimeter of the triangle formed, giving perimeters to 3 significant figures.

(a)

$y = 2x + 1$ $y = 1$ $x = 3$

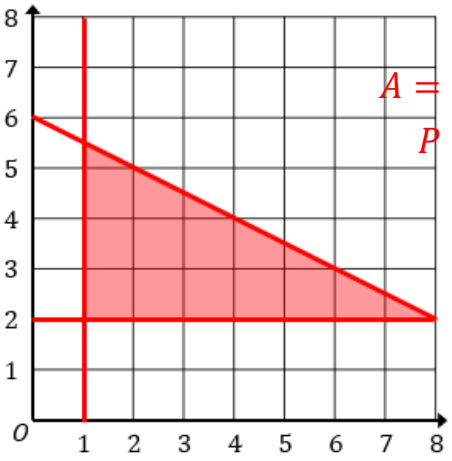


$A = 9$ units^2

$P = 15.7$ units

(b)

$y = 6 - 0.5x$ $y = 2$ $x = 1$

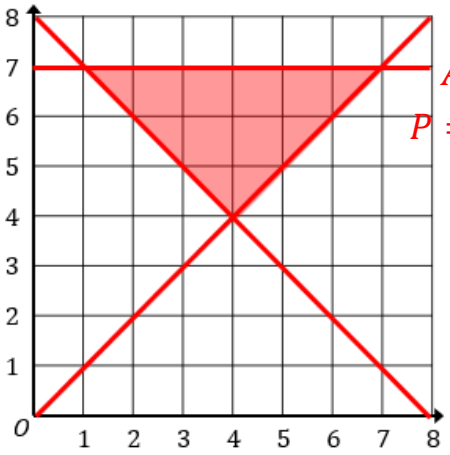


$A = 12.25$ units^2

$P = 18.3$ units

(c)

$x + y = 8$ $y = x$ $y = 7$

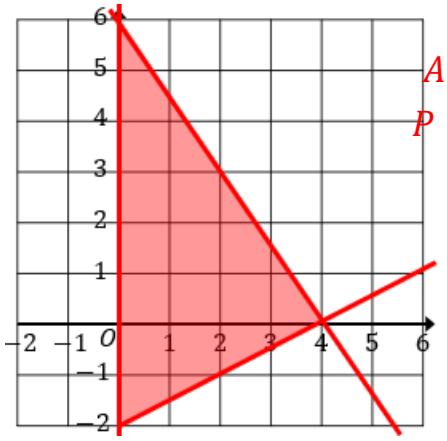


$A = 9$ units^2

$P = 14.5$ units

(d)

$3x + 2y = 12$ $y = 0.5x - 2$ $x = 0$

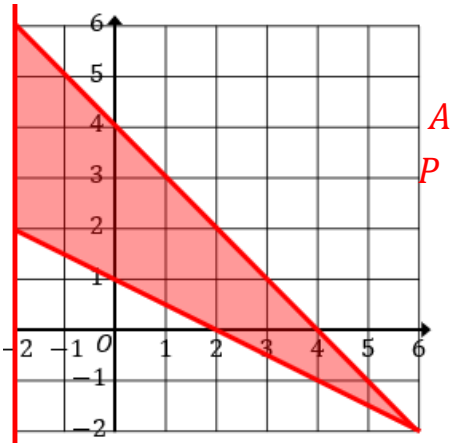


$A = 16$ units^2

$P = 19.7$ units

(e)

$x + y = 4$ $y = 1 - 0.5x$ $x = -2$

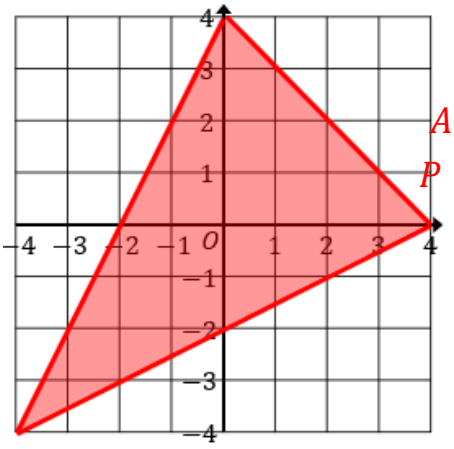


$A = 16$ units^2

$P = 24.3$ units

(f)

$y = 2x + 4$ $x + y = 4$ $y = 0.5x - 2$



$A = 24$ units^2

$P = 23.5$ units