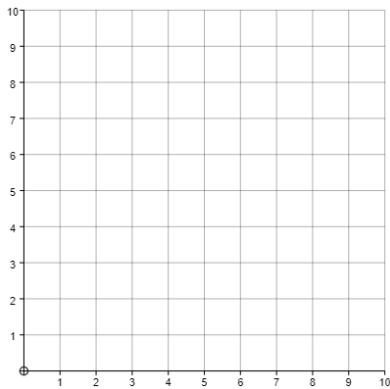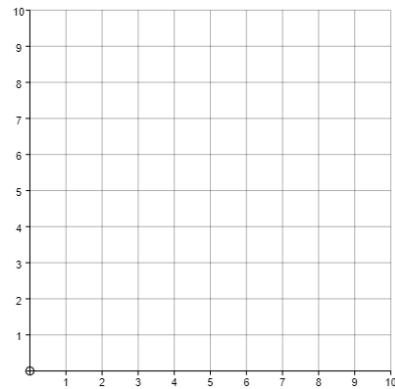# Solving Simultaneous Equations Graphically

(a)

Plot the graphs of
$x + y = 5$ and $x + 3y = 9$

Find the solution to the simultaneous
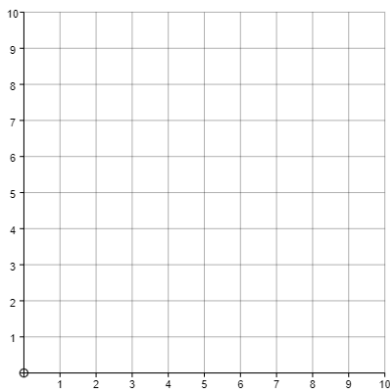equations $x + y = 5$ and $x + 3y = 9$

(b)

Plot the graphs of
$x + y = 7$ and $5x + 2y = 20$

Find the solution to the simultaneous
equations $x + y = 7$ and $5x + 2y = 20$
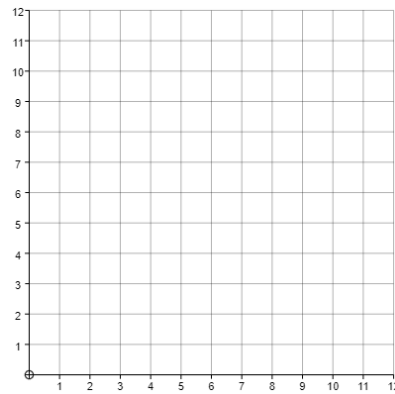
(c)

Plot the graphs of
$y = x + 1$ and $x + y = 9$

Find the solution to the simultaneous
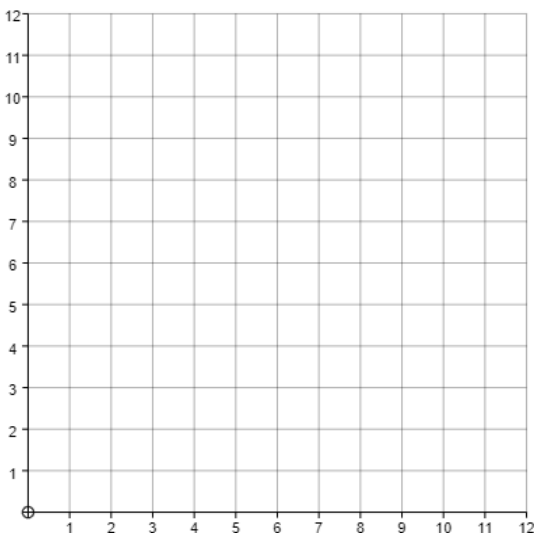equations $y = x + 1$ and $x + y = 9$

(d)

Plot the graphs of
$y = 2x$ and $2x + y = 12$

Find the solution to the simultaneous
equations $y = 2x$ and $2x + y = 12$

(e)

Plot the graphs of $x + y = 8$, $y = x$, $y = \frac{1}{2}x + 5$
and $x + y = 11$

Use the graphs to find the solutions of the
simultaneous equations:
(i) $x + y = 8$ and $y = x$

(ii) $x + y = 8$ and $y = \frac{1}{2}x + 5$

(iii) $y = x$ and $x + y = 11$