

- 10 Solve each system of equations. (Remember: Decide for which variable you are going to obtain an expression.)
- (a) $x - y = -2$ (b) $2q - p = 3$ (c) $3g = h + 10$ (d) $3x - z = -9$
 $x + 2y = 7$ $q + 2p = 4$ $h = g - 4$ $z - 2x = 7$
- (e) $3s + 2t = 6$ (f) $2m + 5n = -6$ (g) $2y = w + 5$ (h) $2a - 3b - 1 = 0$
 $s + 2t = 6$ $m + 2n = -3$ $3w - y = 0$ $2a - b - 5 = 0$
- 11 (a) Find the co-ordinates of the point of intersection of the graphs given by $3x - y = -7$ and $x - 2y = 1$.
 (b) How can you check your answer in (a)?
- 12 Find the co-ordinates of the point of intersection of each of the following.
- (a) $x - 2y = 1$ (b) $3x + y = 8$ (c) $x + y = 5$ (d) $3x - y = 4$
 $x + y = 2$ $2x - y = 7$ $2y - x = 4$ $x - 2y = 3$
- 13 What are the co-ordinates of the point that lies on both of the lines?
- (a) $y - 2x = -2$ (b) $2x - y = -1$ (c) $2x - y = -3$ (d) $3y = 2x - 5$
 $x + y = 4$ $x - 2y = -5$ $x + y = 0$ $2x = y + 3$
- 14 (a) Two lines are given by $3x - y = 7$ and $x + 3y = 9$. Find the co-ordinates of the point of intersection.
 (b) The paths of two ships are given by the equations $3x - y = 7$ and $x + 3y = 9$. At what point do their paths cross?
 (c) A fire is located at the intersection of the lines of sight given by the equations $3x - y = 7$ and $x + 3y = 9$. At what point is the fire located?
 (d) How are the questions in (a), (b), and (c) alike? How are they different?