

Equation of a Straight Line

Red (a - d)

- a) Has a gradient of 4 and passes through (0, 3).
- b) Has a gradient of 2 and passes through (0, -4).
- c) Parallel to $y = 2x + 3$ and passes through (0, 5).
- d) Parallel to $y = 4x - 5$ and passes through (0, -2).
- e) Parallel to $y = 2x + 2$ and passes through (3, 5).
- f) Parallel to $y = 4x - 3$ and passes through (1, 7).
- g) Parallel to $y = 5 - x$ and passes through (1, 3).
- h) Parallel to $y = 7 - 2x$ and passes through (2, 5).

Green (g - j)

- a) Passes through (1, 2) and (4, 11).
- b) Passes through (3, -4) and (5, 6).
- c) Passes through (1, -6) and (-3, 10).
- d) Passes through (2, -5) and (-1, 4).
- e) Passes through (2.5, 4) and (5, 11.5).
- f) Passes through (0.5, 2.5) and (1.25, 5.5).
- g) Perpendicular to $y = 4x + 5$ and passes through (0, 5).
- h) Perpendicular to $y = 2x - 7$ and passes through (0, 4).

Amber (d - g)

- a) Parallel to $y = 8 - x$ and passes through (5, 2).
- b) Parallel to $y = 3 - 2x$ and passes through (2, 5).
- c) Parallel to $y = 5 - 3x$ and passes through (4, 1).
- d) Parallel to $y = 7 - 2x$ and passes through (-3, 12).
- e) Passes through (0, 3) and (3, 12).
- f) Passes through (0, -2) and (2, 10).
- g) Passes through (1, 5) and (4, 11).
- h) Passes through (2, -3) and (4, 13).

Purple (i - l)

- a) Passes through (4.5, 1.5) and (2.5, 7.5).
- b) Passes through (0.5, 3) and (3, -6).
- c) Perpendicular to $y = 3x + 1$ and passes through (0, 3).
- d) Perpendicular to $y = \frac{1}{2}x - 3$ and passes through (0, 8).
- e) Perpendicular to $y = \frac{1}{4}x + 1$ and passes through (8, 2).
- f) Perpendicular to $y = \frac{2}{3}x + 3$ and passes through (4, 7).
- g) Perpendicular to $y = 7 - 3x$ and passes through (12, 5).
- h) Perpendicular to $y = 4 - \frac{1}{2}x$ and passes through (4, 9).