

YEAR 11 MM

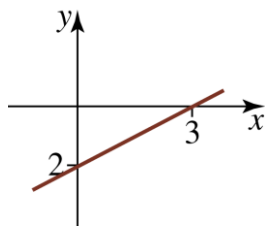
Linear Revision

ANSWERS

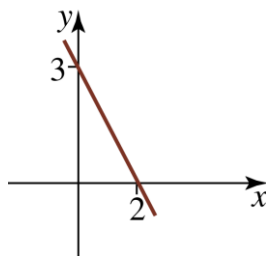
- 1** The value for x which satisfies the equation $\frac{x-3}{3} = \frac{2x-1}{4}$ is: **C**
- A $\frac{1}{2}$
B 3
C $-4\frac{1}{2}$
D -8
E $4\frac{1}{2}$
- 2** Given $t = 5$, $s = 22.5$ and $v = 9$, the value for u in the formula $s = \frac{1}{2}(u+v)t$ is: **A**
- A 0
B -4
C -0.4
D 0.4
E 4
- 3** The gradient of the straight line passing through the points $(-2, 5)$ and $(3, -3)$ is: **B**
- A -8
B $-\frac{8}{5}$
C $\frac{5}{8}$
D $-\frac{5}{8}$
E $\frac{8}{5}$
- 4** The equation $3x + 2y - 4 = 0$ has gradient and y-intercept respectively: **E**
- A 3, -4
B -3, 4
C $\frac{2}{3}, \frac{4}{3}$
D $-\frac{2}{3}, \frac{4}{3}$
E $-\frac{3}{2}, 2$

- 5 The equation $3y - 2x + 6 = 0$ can be represented by the graph: A

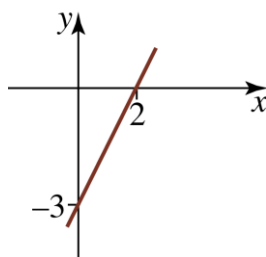
A



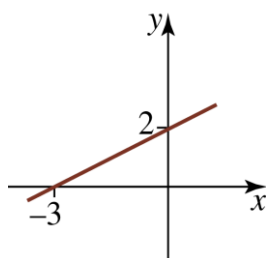
B



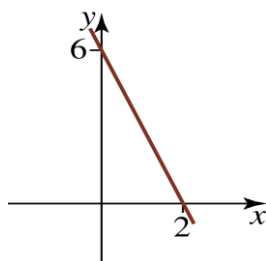
C



D



E



- 6 The solution to the simultaneous equations $5S - 3C = 125$ D
 $S + C = 65$ is:

- A $S = 20, C = 45$
- B $S = 22, C = 13$
- C $S = 25, C = 40$
- D $S = 40, C = 25$
- E $S = 45, C = 20$

- 7 A line perpendicular to $2y + 3x - 6 = 0$ could be: E

- A $3y + 2x - 6 = 0$
- B $y - 3x + 4 = 0$
- C $3y - x - 4 = 0$
- D $2y - 2x - 4 = 0$
- E $3y - 2x - 8 = 0$

- 8 The equation of the line passing through the points $(-3, 2)$ and $(4, 6)$ is: C

- A $7y - x - 26 = 0$
- B $7y + 4x + 26 = 0$
- C $7y - 4x - 26 = 0$
- D $y + 4x + 26 = 0$
- E $7y + 4x - 26 = 0$

- 9 The exact distance between the points $(-3, 2)$ and $(3, -4)$ is: D

- A $2\sqrt{6}$
- B $\sqrt{82}$
- C 6
- D $6\sqrt{2}$
- E $2\sqrt{10}$

- 10 A quadrilateral has vertices with coordinates $(2, 3)$, $(-1, 1)$, $(-2, -3)$ and $(2, 1)$. The coordinates of the mid-point of one of the diagonals is: A

- A $(0.5, 0)$
- B $(0, 0.5)$
- C $(2, 1)$
- D $(0, -2)$
- E $(-1.5, -1)$

- 11 The value for x which satisfies the equation $\frac{3(x+2)}{7} = 5 + \frac{2-2x}{14}$ is: A

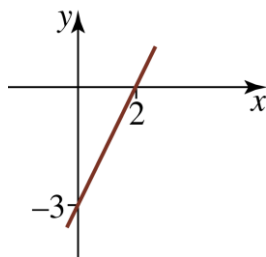
- A $7\frac{1}{2}$
- B $3\frac{1}{2}$
- C $-3\frac{1}{2}$
- D $\frac{2}{7}$
- E $\frac{2}{15}$

- 12** Given $v = 14$, $s = 20$ and $u = 6$, the value for a in the formula $v^2 = u^2 + 2as$ is **E**
- A -5.8
 B 5.8
 C -11.6
 D 2.9
 E 4

- 13** The gradient of the straight line passing through the points $(-3, 1)$ and $(-1, 6)$ is: **C**
- A 0.8
 B -0.8
 C 2.5
 D -2.5
 E 1

- 14** The equation $3x + 2y - 4 = 0$ has gradient and y-intercept respectively: **B**
- A $-3, 2$
 B $-\frac{3}{2}, 2$
 C $3, -2$
 D $-\frac{3}{2}, 4$
 E $\frac{3}{2}, -4$

- 15** The equation for the following graph is: **E**



- A $2x + 3y - 6 = 0$
 B $2x - 3y + 6 = 0$
 C $3x + 2y + 6 = 0$
 D $2x - 3y - 6 = 0$
 E $3x - 2y - 6 = 0$
- 16** The solution to the simultaneous equations $4x - 3y = 19$ and $x + 4y = 0$ is: **B**
- A $(2.5, -3)$
 B $(4, -1)$
 C $(1, -5)$
 D $(-4, 1)$
 E $(2, 0)$

- 17** Which pair of the following equations are parallel? **A**
- I $4x - 2y - 1 = 0$
 II $2x - y + 1 = 0$
 III $x - 2y - 4 = 0$
 IV $2x + y - 3 = 0$
- A I and II
 B I and III
 C I and IV
 D II and III
 E III and IV

- 18** The equation of the line passing through the points $(1, -3)$ and $(3, 4)$ is **C**
- A $2x + 7y - 34 = 0$
 B $2x - 7y + 22 = 0$
 C $7x - 2y - 13 = 0$
 D $7x - 2y + 13 = 0$
 E $7x - 2y + 1 = 0$

- 19** The exact distance between the points $(-1, -5)$ and $(5, -1)$ is: **A**
- A $2\sqrt{13}$
 B $13\sqrt{2}$
 C $2\sqrt{10}$
 D 52
 E $5\sqrt{2}$

- 20** The mid-point of the line joining the points $(-2, 8)$ and $(12, -2)$ is: **E**
- A $(5, 7)$
 B $(-7, 5)$
 C $(7, 5)$
 D $(5, 5)$
 E $(5, 3)$

- 21** A television repair person charges a \$35 service fee plus \$15 for each 15 minutes. The total cost of a service call could be represented by which equation? (Use C for cost, M for minutes and H for hours.) **E**
- A $C = 35 + 15M$
 B $C = 35 + 4H$
 C $C = 35 + 180M$
 D $C = 95H$
 E $C = 35 + 60H$

- 22** How long would an electrician have visited for, if her total charge was \$111 given her initial service call charge is \$48 and her hourly rate is \$35 per hour? **B**
- A 2 hours
 - B 1 hour and 48 minutes
 - C 1 hour and 15 minutes
 - D 2 hours and 2 minutes
 - E 1 hour and 50 minutes