

MODULE MATHEMATICS SPM: The Straight Line

$$m = \frac{y_2 - y_1}{x_2 - x_1},$$

$$y = mx + c,$$

$$y - y_1 = m(x - x_1)$$

y-intercept [x = 0]

x-intercept [y = 0]

1. A(3, 4), B(4, 6)	2. C(-2, 3), D(3, 6)	3. E(0, 0) F(-4, -8)	4. G(0, -2) H(8, -6)	5. I(-2, 3) J(4, 8)
6. K(0, -2) L(4, 6)	7. M(-2, -4) N(3, 5)	8. O(4, 8) P(-1, -2)	9. Q(2, 2) R(-4, -4)	10. S(3, 6) T(-4, 0)

11. $m = 2$, A(4, 6)	12. $m = -3$, B(-2, 3)	13. $m = \frac{1}{2}$, C(0, 4)	14. $m = -\frac{2}{3}$, D(-2, -4)	15. $m = \frac{3}{4}$, E(3, 6)
16. $m = -2$, F(6, 6)	17. $m = \frac{3}{2}$, G(0, -6)	18. $m = \frac{3}{5}$, H(1, -1)	19. $m = -\frac{1}{2}$, I(-2, -4)	20. $m = \frac{4}{3}$, J(4, 0)

21. $y = 2x + 3$	22. $y = -3x - 5$	23. $y = -2x - 9$	24. $y = 5x + 6$	25. $y = 2(x + 4)$
26. $3y = x - 6$	27. $2y = -x + 7$	28. $2x - 3y = 15$	29. $3y + x = 3x - 6$	30. $3x - 2y = 5$

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y-intercept $[x = 0]$

x-intercept $[y = 0]$