Y = MX + C (GRADIENT)

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1. $y = 2x + 5$
2. $y = -3x + 7$
3. $y = x - 4$
4. $y = -x + 9$
5. $y = 0.5x + 2$
6. $y = -2.5x - 1$
7. $y = 4x$
8. $y = -7x$
9. $y = 3x - 8$
10. $y = -4x + 6$
11. $y = 1.2x + 3.4$
12. $y = -0.8x - 2.1$
13. $y = 9x + 11$
14. $y = -10x - 12$
15. $y = 6x - 3$
16. $y = -5x + 2$
17. $y = 0.25x + 7$
18. $y = -0.75x - 5$
19. $y = 8x + 13$
20. $y = -9x - 14$
21. $y = 2.3x + 4.5$
22. $y = -3.7x - 6.8$
23. $y = 7x - 9$
24. $y = -8x + 10$
25. $y = 1.8x + 2.6$
26. $y = -2.4x - 3.9$
27. $y = 5x + 15$
28. $y = -6x - 16$
29. $y = 0.3x + 1.7$
30. $y = -0.9x - 2.3$

MASTER QUESTIONS

M1. A straight line passes through points (2, 5) and (4, 9). Find its gradient.

M2. The cost of a taxi journey is £3 plus £1.50 per mile. Write the equation and find the cost per mile.

M3. A mobile phone plan charges £15 monthly plus £0.10 per minute. What is the cost per minute?

M4. Water is leaking from a tank at 2 litres per hour. If the tank initially had 100 litres, what is the rate of leakage?

M5. A car's value depreciates by £2000 per year. If it was bought for £18000, what is the annual depreciation rate?

M6. A staircase rises 3 metres vertically over a horizontal distance of 4 metres. What is its gradient?

M7. A company's profits increase by £5000 for every 100 units sold. What is the profit per unit?

M8. The temperature drops by 2°C every hour during the night. What is the rate of temperature change?

M9. A subscription service charges £8 per month plus £0.25 per download. What is the cost per download?

M10. A hill rises 15 metres over a horizontal distance of 60 metres. What is its gradient?