FINDING THE GRADIENT

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

MAIN QUESTIONS

1. Find the gradient of y = 2x + 3 | 2
2. Find the gradient of y = -5x + 1 | -5
3. Find the gradient of y = 7x - 4 | 7
4. Find the gradient of y = -3x + 9 | -3
5. Find the gradient of y = 10x - 2 | 10
6. Find the gradient of y = -8x + 6 | -8
7. Find the gradient of y = 4x + 11 | 4
8. Find the gradient of y = -1x + 5 | -1
9. Find the gradient of y = 9x - 7 | 9
10. Find the gradient of y = -6x + 8 | -6
11. Find the gradient between (1, 3) and (3, 7) | 2
12. Find the gradient between (2, 5) and (4, 11) | 3
13. Find the gradient between (0, 4) and (2, 10) | 3
14. Find the gradient between (1, 8) and (3, 2) | -3
15. Find the gradient between (2, 7) and (5, 16) | 3
16. Find the gradient between (3, 12) and (6, 3) | -3
17. Find the gradient between (4, 9) and (7, 18) | 3
18. Find the gradient between (5, 14) and (8, 5) | -3

19. Find the gradient between (6, 11) and (9, 20) | 3

20. Find the gradient between (7, 16) and (10, 7) | -3

21. Find the gradient of the line passing through (1, 2) and (4, 8) | 2

22. Find the gradient of the line passing through (2, 3) and (5, 9) | 2

23. Find the gradient of the line passing through (3, 4) and (6, 10) | 2

24. Find the gradient of the line passing through (4, 5) and (7, 11) | 2

25. Find the gradient of the line passing through (5, 6) and (8, 12) | 2

26. Find the gradient of the line passing through (1, 10) and (3, 4) | -3

27. Find the gradient of the line passing through (2, 12) and (4, 6) | -3

28. Find the gradient of the line passing through (3, 14) and (5, 8) | -3

29. Find the gradient of the line passing through (4, 16) and (6, 10) | -3

30. Find the gradient of the line passing through (5, 18) and (7, 12) | -3

MASTER QUESTIONS

M1. A hill rises 15 metres over a horizontal distance of 30 metres. What is its gradient? | 0.5

M2. A ramp descends 4 metres over a horizontal distance of 20 metres. What is its gradient? | -0.2

M3. A road climbs 60 metres over 2 kilometres. What is its gradient? | 0.03

M4. A staircase rises 3.6 metres over 4.5 metres horizontally. What is its gradient? | 0.8

M5. A ski slope drops 200 metres over 800 metres horizontally. What is its gradient?

-0.25

M6. A roof pitches upwards 2.5 metres over 5 metres horizontally. What is its gradient?

0.5

M7. A water pipe falls 1 metre over 50 metres length. What is its gradient?

-0.02

M8. A railway track rises 12 metres over 300 metres. What is its gradient?

0.04

M9. A wheelchair ramp rises 0.9 metres over 6 metres. What is its gradient?

0.15

M10. A drainage ditch falls 0.5 metres over 10 metres. What is its gradient?

-0.05