

FINDING THE GRADIENT

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

MAIN QUESTIONS

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| 1. Find the gradient of $y = 2x + 3$ | 2. Find the gradient of $y = -5x + 1$ |
| 3. Find the gradient of $y = 7x - 4$ | 4. Find the gradient of $y = -3x + 9$ |
| 5. Find the gradient of $y = 10x - 2$ | 6. Find the gradient of $y = -8x + 6$ |
| 7. Find the gradient of $y = 4x + 11$ | 8. Find the gradient of $y = -1x + 5$ |
| 9. Find the gradient of $y = 9x - 7$ | 10. Find the gradient of $y = -6x + 8$ |
| 11. Find the gradient between (1, 3) and (3, 7) | 12. Find the gradient between (2, 5) and (4, 11) |
| 13. Find the gradient between (0, 4) and (2, 10) | 14. Find the gradient between (1, 8) and (3, 2) |
| 15. Find the gradient between (2, 7) and (5, 16) | 16. Find the gradient between (3, 12) and (6, 3) |
| 17. Find the gradient between (4, 9) and (7, 18) | 18. Find the gradient between (5, 14) and (8, 5) |
| 19. Find the gradient between (6, 11) and (9, 20) | 20. Find the gradient between (7, 16) and (10, 7) |

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| 21. | Find the gradient of the line passing through (1, 2) and (4, 8) | 22. | Find the gradient of the line passing through (2, 3) and (5, 9) |
| 23. | Find the gradient of the line passing through (3, 4) and (6, 10) | 24. | Find the gradient of the line passing through (4, 5) and (7, 11) |
| 25. | Find the gradient of the line passing through (5, 6) and (8, 12) | 26. | Find the gradient of the line passing through (1, 10) and (3, 4) |
| 27. | Find the gradient of the line passing through (2, 12) and (4, 6) | 28. | Find the gradient of the line passing through (3, 14) and (5, 8) |
| 29. | Find the gradient of the line passing through (4, 16) and (6, 10) | 30. | Find the gradient of the line passing through (5, 18) and (7, 12) |

MASTER QUESTIONS



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- M1.** A hill rises 15 metres over a horizontal distance of 30 metres. What is its gradient?
- M2.** A ramp descends 4 metres over a horizontal distance of 20 metres. What is its gradient?
- M3.** A road climbs 60 metres over 2 kilometres. What is its gradient?
- M4.** A staircase rises 3.6 metres over 4.5 metres horizontally. What is its gradient?
- M5.** A ski slope drops 200 metres over 800 metres horizontally. What is its gradient?
- M6.** A roof pitches upwards 2.5 metres over 5 metres horizontally. What is its gradient?

- M7.** A water pipe falls 1 metre over 50 metres length. What is its gradient?
- M8.** A railway track rises 12 metres over 300 metres. What is its gradient?
- M9.** A wheelchair ramp rises 0.9 metres over 6 metres. What is its gradient?
- M10.** A drainage ditch falls 0.5 metres over 10 metres. What is its gradient?