

PLOTTING LINEAR GRAPHS

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

MAIN QUESTIONS

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|-----|-----------------|-----|-----------------|
| 1. | 1, 1 | 2. | 2, 3 |
| 3. | -1, 4 | 4. | 0, 5 |
| 5. | 3, -2 | 6. | -4, 0 |
| 7. | $1/2$, 2 | 8. | $-3/4$, 1 |
| 9. | 5, $-1/2$ | 10. | -2, $3/4$ |
| 11. | 0, -3 | 12. | $4/3$, 0 |
| 13. | $-1/5$, -2 | 14. | 7, $1/3$ |
| 15. | $-5/2$, 4 | 16. | $3/5$, $-1/2$ |
| 17. | $-2/7$, $5/6$ | 18. | 0, 0 |
| 19. | 8, $-3/4$ | 20. | -6, $2/5$ |
| 21. | $9/4$, $-1/3$ | 22. | $-3/8$, $-7/2$ |
| 23. | $5/6$, $4/9$ | 24. | $-7/3$, 0 |
| 25. | 0, $4/5$ | 26. | 10, $-5/6$ |
| 27. | $-4/5$, $3/7$ | 28. | $11/2$, $-8/3$ |
| 29. | $-9/4$, $-2/5$ | 30. | $12/5$, $7/8$ |

MASTER QUESTIONS



- M1.** A taxi charges a fixed fee of £2.50 plus £1.80 per kilometre. Write the equation for total cost (y) in pounds for x kilometres travelled.
- M2.** The temperature decreases by 0.4°C per hour from an initial reading of 15°C . Write the equation for temperature (y) after x hours.
- M3.** A plant is 30 cm tall and grows 2.5 cm per week. Write the equation for height (y) in cm after x weeks.
- M4.** A car's fuel tank has 45 litres initially and consumes 0.06 litres per kilometre. Write the equation for remaining fuel (y) in litres after x kilometres.
- M5.** A swimming pool loses 3 cm of water per day from an initial depth of 120 cm. Write the equation for water depth (y) in cm after x days.
- M6.** A candle burns at 1.2 cm per hour from an original length of 25 cm. Write the equation for length (y) in cm after x hours.
- M7.** A phone plan costs £12 monthly plus £0.15 per text. Write the equation for total cost (y) in pounds for x texts sent.
- M8.** A rainwater tank fills at 8 litres per minute from an initial 200 litres. Write the equation for volume (y) in litres after x minutes.
- M9.** A lorry depreciates by £1200 annually from a purchase price of £15000. Write the equation for value (y) in pounds after x years.
- M10.** A printer uses 0.8 sheets per minute from a 500-sheet tray. Write the equation for remaining sheets (y) after x minutes.