CONTINUING SEQUENCES

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

MAIN QUESTIONS

1. 2, 5, 8, 11, 14, ___, ___, ___

2. 7, 11, 15, 19, 23, ___, ___, ___

3. -4, -1, 2, 5, 8, ___, ___, ___

4. 12, 9, 6, 3, 0, ___, ___, ___

5. 0.5, 1.0, 1.5, 2.0, 2.5, ___, ___, ___

6. 100, 95, 90, 85, 80, ___, ___, ___

7. -10, -7, -4, -1, 2, ___, ___, ___

8. 3.2, 3.7, 4.2, 4.7, 5.2, ___, ___, ___

9. 17, 14, 11, 8, 5, ___, ___, ___

10. ¼, ½, ¾, 1, 1¼, ___, ___, ___

11. 2, 5, 8, ___, 14, ___, ___, ___

12. 10, ___, 20, 25, 30, ___, ___, ___

13. 7, 12, ___, 22, 27, ___, ___, ___

14. -3, ___, 3, 6, 9, ___, ___, ___

15. 50, 45, ___, 35, 30, ___, ___, ___

16. 1.1, ___, 2.1, 2.6, 3.1, ___, ___, ___

17. ___, 18, 24, 30, 36, ___, ___, ___

18. 100, 92, ___, 76, 68, ___, ___, ___

19. -15, -11, ___, -3, 1, ___, ___, ___

20. 0.8, 1.4, ___, 2.6, 3.2, ___, ___, ___

21. 22, ___, 32, 37, 42, ___, ___, ___

22. ¾, ___, 1¼, 1½, 1¾, ___, ___, ___

23. 60, 55, ___, 45, 40, ___, ___, ___

24. -20, -16, ___, -8, -4, ___, ___, ___

25. 2.5, ___, 4.5, 5.5, 6.5, ___, ___, ___

26. 17, ___, 27, 32, 37, ___, ___, ___

27. 100, 94, ___, 82, 76, ___, ___, ___

28. -8, -4, ___, 4, 8, ___, ___, ___

29. 0.3, 0.7, ___, 1.5, 1.9, ___, ___, ___

30. 45, 40, ___, 30, 25, ___, ___, ___

MASTER QUESTIONS

M1. A theatre has seats arranged in rows where each row has 4 more seats than the previous row. If the first row has 12 seats, how many seats are in the 8th row?

M2. A staircase has steps that increase in height by 2cm each step. If the first step is 15cm high, what is the height of the 10th step?

M3. A savings account gains £5 more interest each month than the previous month. If the first month's interest was £20, what will be the total interest after 6 months?

M4. A plant grows 3cm taller each week. If it was 25cm tall at the start of the experiment, how many weeks will it take to reach 46cm?

M5. A train's speed increases by 8km/h every minute after departure. If it starts at 30km/h, what will its speed be after 5 minutes?

M6. A company's profits decrease by £2000 each quarter. If the profit was £50,000 in Q1, what will be the profit in Q4?

M7. A temperature drops by 2°C every hour. If it's 18°C now, what will the temperature be in 6 hours?

M8. A runner improves her time by 3 seconds each race. If her first race time was 65 seconds, what will her time be in the 7th race?

M9. A building's floors are numbered with the ground floor as 0. Each floor above is 3m higher than the one below. How high is the 12th floor?

M10. A car's value depreciates by £1500 each year. If it was bought for £18,000, what will its value be after 5 years?