

REARRANGING FORMULAE

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

MAIN QUESTIONS

1. $y = 2x + 3$

2. $A = \pi r^2$

3. $v = u + at$

4. $P = 2(1 + w)$

5. $E = mc^2$

6. $S = ut + \frac{1}{2}at^2$

7. $V = \frac{1}{3}\pi r^2 h$

8. $F = (9/5)C + 32$

9. $T = 2\pi\sqrt{1/g}$

10. $ax + b = cx + d$

11. $y = 3x - 2x + 5$

12. $p = 2q + 3q - 7$

13. $m = 4n + 2n - 3$

14. $z = 5w - 2w + 8$

15. $k = 7j + 3j - 4$

16. $r = 2s + 5s - 9$

17. $t = 6u - 3u + 12$

18. $v = 8w + 2w - 15$

19. $x = 4y - y + 7$

20. $a = 5b + 2b - 11$

21. $c = 3d + 4d - 6$

22. $e = 2f - 5f + 9$

23. $g = 6h + h - 13$

24. $i = 4j - 2j + 8$

25. $k = 7l + 3l - 10$

26. $m = 5n - n + 14$

27. $o = 8p + 2p - 17$

28. $q = 6r - 3r + 20$

29. $s = 9t + t - 25$

MASTER QUESTIONS



- M1.** The area of a circle is 78.5cm^2 . Find its radius.
- M2.** A car accelerates from 20m/s to 30m/s in 5 seconds. Calculate its acceleration.
- M3.** The perimeter of a rectangle is 36cm and its length is twice its width. Find its dimensions.
- M4.** A triangle has area 24cm^2 and height 8cm . Find its base length.
- M5.** The volume of a cylinder is 314cm^3 with height 10cm . Find its radius.
- M6.** A train travels 240km in 3 hours. Calculate its average speed.
- M7.** The sum of three consecutive even numbers is 54. Find the numbers.
- M8.** A right-angled triangle has hypotenuse 13cm and one side 5cm . Find the other side.
- M9.** The cost of 5 books and 3 pens is £32. If a book costs twice a pen, find the cost of each.
- M10.** A mixture contains alcohol and water in ratio 3:2. If there is 15 litres of alcohol, find the total volume.