EQUATIONS WITH BRACKETS

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

MAIN QUESTIONS

1. $2(3x + 1) = 14$
2. $3(2x + 4) = 24$
3. $4(2x + 3) = 28$
4. $5(2x + 1) = 25$
5. $2(4x + 3) = 22$
6. $3(3x + 2) = 24$
7. $4(3x + 2) = 32$
8. $5(3x + 1) = 35$
9. $2(5x + 4) = 28$
10. $3(4x + 3) = 33$
11. $6(2x + 1) = 30$
12. $7(2x + 3) = 35$
13. $8(2x + 1) = 40$
14. $9(2x + 2) = 36$
15. $2(6x + 5) = 34$
16. $3(5x + 4) = 42$
17. $4(4x + 3) = 44$
18. $5(4x + 2) = 50$
19. $6(3x + 2) = 48$
20. $7(3x + 1) = 49$
21. $8(3x + 2) = 64$
22. $9(3x + 1) = 63$
23. $2(7x + 6) = 40$
24. $3(6x + 5) = 51$
25. $4(5x + 4) = 56$
26. $5(5x + 3) = 65$
27. $6(4x + 3) = 66$
28. $7(4x + 2) = 70$
29. $8(4x + 3) = 88$
30. $9(4x + 2) = 90$

MASTER QUESTIONS

M1. A rectangle's length is 3 times its width plus 2cm. If the perimeter is 28cm, find the width.

M2. A number multiplied by 4 and increased by 3 gives 27. Find the number.

M3. Five times a number plus 2 equals 32. What is the number?

M4. A box contains sweets. If each child gets 3 sweets plus 2 extra, and 20 sweets are distributed, how many children are there?

M5. The area of a rectangle is 35cm^2. If the length is 3cm more than twice the width, find the width.

M6. A train travels at a constant speed. In 4 hours it covers 5 times the distance plus 8km, totalling 48km. Find the speed.

M7. A bookshelf has 7 shelves. Each shelf holds 4 books plus 3 extra, with 35 books total. How many books per shelf?

M8. A recipe requires 2 cups of flour per batch plus 3 extra cups. With 17 cups available, how many batches can be made?

M9. A garden's length is 5m more than twice its width. If the perimeter is 34m, find the width.

M10. A number when multiplied by 6 and increased by 4 gives 40. Find the number.