EQUATIONS WITH BRACKETS

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

MAIN QUESTIONS

1. $2(x + 3) = 10$ x = 2
2. $3(2x - 1) = 15$ x = 3
3. $4(3x + 2) = 32$ x = 2
4. $5(x - 4) = 20$ x = 8
5. $2(5x + 1) = 22$ x = 2
6. $3(4x - 2) = 30$ x = 3
7. $6(2x + 3) = 42$ x = 2
8. $7(x - 5) = 14$ x = 7
9. $4(5x - 3) = 68$ x = 4
10. $3(6x + 4) = 66$ x = 3
11. $5(3x - 2) = 65$ x = 5
12. $2(7x + 5) = 38$ x = 2
13. $8(2x - 1) = 56$ x = 4
14. $9(x + 2) = 63$ x = 5
15. $6(4x - 3) = 102$ x = 5
16. $10(3x + 1) = 100$ x = 3
17. $12(2x - 5) = 84$ x = 6
18. $15(x + 4) = 120$ x = 4
19. $20(3x - 2) = 200$ x = 4
20. $25(2x + 1) = 225$ x = 4

MASTER QUESTIONS

M1. A rectangle has a length of $(3x + 2)$ cm and a width of $(x - 1)$ cm. If the perimeter is 44 cm, find the value of x.   x = 5

M2. The sum of three consecutive integers is 72. If the middle integer is x, find the value of x.

$x = 24$

M3. A train travels at a speed of (4x - 10) km/h for 3 hours and covers a distance of 150 km. Find the value of x.

$x = 15$

M4. The area of a square is $(9x^2 - 24x + 16)$ cm^2. Find the length of one side of the square.

The side length is (3x - 4) cm