## **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.  $3(2x - 1) = 15$ 

3. 
$$4(3x + 2) = 32$$
  $x = 2$  4.  $5(x - 4) = 20$   $x = 8$ 

9. 
$$4(5x-3) = 68$$
  $x = 4$  10.  $3(2x+5) = 39$   $x = 4$ 

11. 
$$5(3x - 4) = 55$$
  $x = 5$  12.  $2(4x + 7) = 38$   $x = 3$ 

13. 
$$6(3x-2) = 78$$
  $x = 5$  14.  $8(2x+1) = 88$   $x = 5$ 

15. 
$$9(x-3) = 54$$
  $x = 9$  16.  $5(4x-6) = 90$   $x = 6$ 

17. 
$$7(3x + 4) = 133$$
  $x = 5$  18.  $10(2x - 5) = 150$   $x = 10$ 

19. 
$$12(3x + 2) = 300$$
  $x = 7$  20.  $15(x - 4) = 180$   $x = 16$ 

## MASTER QUESTIONS



x = 4

x = 3

M1. A rectangle has a length of (2x + 3) cm and a width of (x - 1) cm. If the perimeter is 34 cm, find the value of x.

- 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 (3x 10) km/h for 2 hours and covers a distance of 100 km. Find the value of x.
- M4. The area of a triangle is  $60 \text{ cm}^2$ . If the base is (4x + 2) cm and the height is 10 cm, find the value of x.