# Equations

1. Solve these equations:

a. $3x + 6 = 14$     b. $5x - 3 = 17$     c. $8x + 3 = 27$     d. $7x - 6 = 29$

e. $9x + 3 = 45$     f. $7x - 8 = 20$     g. $6x + 7 = 31$     h. $8x - 5 = 11$

2. Solve these equations:

a. $7x + 6 = 38 - x$     b. $5x - 7 = 23 + 3x$     c. $9x - 5 = 6x + 16$

d. $8x + 5 = 26 + x$     e. $7x - 9 = 45 + x$     f. $8x - 9 = 3x + 31$

3. Solve these equations:

a. $3(x – 5) = 2x + 3$     b. $5(x + 2) = 32 + 3x$   c. $2(x - 6) = 24 - 7x$

d. $4(x + 3) = 2x + 20$   e. $8(x - 4) = 8 + 3x$     f. $7(x - 2) = 16 - 8x$

4. Solve these equations:

a. $7(x + 2) = 6(x + 3)$     b. $4(x – 5) = 2(x + 8)$     c. $6(x + 3) = 2(x + 6)$

a. $4(x + 2) = 3(x + 3)$     b. $5(x – 4) = 2(x + 5)$     c. $7(x + 2) = 2(x + 12)$

5. If Joe is twice as old as his sister and the sum of their ages is 24, how old is Joe?

6. Andrew is $x$ years old and Sam is $x$ + 3 years old and Robert is twice as old as Andrew. If sum of the three boy's ages is 43 years, how old is Andrew?

7. Sue, Sally and Shirley all have part time jobs. Sue earns twice as much as Shirley. Sally earns £10 more than Shirley. The total of the three girls' earnings is £160. What does each girl earn?

8. Mrs Fruity has 3 times more apple trees than plum trees and 5 less pear trees than plum tress in her orchard. The orchard only contains apple, plum and pear trees and there is a total of 45 trees. How many plum, pear and apple trees are in the orchard?