

Round all answers to an appropriate degree of accuracy unless specifically stated

1. Simplify

$$3\sqrt{5} + \sqrt{45} - \sqrt{20}$$

2. Solve the system of equations

$$4x - 3y = 17$$

$$2x + 5y = 15$$

3. A function is defined as

$$f(x) = 4x - 11$$

If $f(a) = 13$, find the value of a .

4. Express as a single fraction in its simplest form

$$\frac{2a^2b}{c^3} \times \frac{bc^2}{6a}$$

5. Solve

$$3(3x - 1) = 2x + 25$$

6. A new savings account is designed for long term savers over a 5 year term. It offers an interest rate of 5.4% per annum, provided no withdrawals are made.

Toni deposits £11,500 when she opens it, but can make no further deposits. Calculate how much she will have in her account at the end of her 5 year term, giving your answer to the nearest pound.