

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

1. Change the subject of the formula below to Q .

$$P = \sqrt{\frac{3Q^2}{5}}$$

2. A bag containing linseeds weighs 38.5 kg.

The weight of one linseed is 5.48×10^{-4} mg.

Work out how many linseeds the bag contains.

Give your answer in scientific notation, rounded to 3 significant figures.

3. Three coffees and 2 sandwiches cost £17.25

- a. Write down an equation to represent this information

Four coffees and a sandwich cost £18.50

- b. Write down a second equation to represent this information

- c. Solve these equations to find the cost of a coffee and the cost of a sandwich.

4. Expand and simplify

$$(2x - 3)(x + 1)(x - 4)$$

5. Evaluate

$$1\frac{3}{5} \div 5\frac{1}{3}$$

6. Liquid in a tank was boiled to a temperature of 172°C .

After a coolant was added to a tank, the liquid cooled by 3.5% per hour for 5 hours.

What was the temperature after 5 hours?