Exam Questions

1. Johan works in a cafe. One morning he sells 48 cups of tea and 12 cups of coffee. Write down the ratio of the number of cups of tea to the number of cups of coffee. Write your answer in its simplest form.
2. Sam is a manager in an office. She wants to buy 14 new chairs. Each chair costs £73. Sam will also be charged 20% VAT on the cost of the chairs. Sam has £1200 to buy the chairs. Is £1200 enough for 14 chairs, show your working out.
3. Here is a garden and a pond. The garden and the pond are rectangular. Kayla is covering the garden with grass seed. She will not put any grass seed in the pond. One box of grass seed covers 15 m2 of garden. Work out the number of boxes of grass seed Kayla needs to cover the garden

Graphical user interface, application, Word

Description automatically generated

1. Dave is going on holiday to Madrid. The temperature tomorrow in Madrid will be 21°C. Dave uses this rule to change the temperature into Fahrenheit (°F). Dave thinks the temperature in Madrid will be more than 70°F. Is Dave correct? Show why you think this.

Graphical user interface, application

Description automatically generated

1. James wants to buy a house. The price of the house is a quarter of a million pounds. James must pay a deposit for the house. The deposit is 15% of the price of the house. James already has part of the deposit. He has £32000. How much **more** money does James’s need for the deposit.
2. Here are 7 numbers, calculate the mean.

3.51, 3, 1.1, 4, 4.5, 2.5, 2.81

1. In a factory the working week is from Monday to Friday. There are 46 working weeks in a year. Calculate the number of days in one working year. Show you working out.
2. Nita works at the factory. She will get a bonus if her absence rate is 2% or less. This rule is used to calculate her absence rate. Nita was absent from work for 9 days in the last working year. Does Nina get a bonus? Show why you think this.

Graphical user interface, application

Description automatically generated

1. Tina is getting broadband for her new flat. She finds this deal. Tina buys the router and the 18 months contract. Work out the total cost of this deal for Tina.

Graphical user interface, application, Word

Description automatically generated

1. Varney wants to cover a wall with sealing mixture. She reads this information about how to make the mixture. Varney wants to make 9 litres of mixture. How much water and how concentrate does Varney need to make 9 litres of the mixture?

Graphical user interface, application, Word

Description automatically generated

1. Harpreet wants to put tiles on the ceiling of a room. He has this sketch of the ceiling. Harpreet knows one pack of ceiling tiles covers an area of 3.24m² and costs £34.95. ceiling tiles can be cut and joined. Calculate the total cost of the packs of ceiling tiles Harpreet has to buy.

Graphical user interface

Description automatically generated

1. Sandro is making cottage pie. He finds this list of ingredients. Sandro wants to make cottage pie for 12 people. He wants to know how much meat to use. Calculate the amount of meat Sandro needs to use.

Graphical user interface

Description automatically generated

1. Alex buys a house. He must pay £255,000 for the house. He must also pay 5% of the price in stamp duty. Calculate the total amount Alex must pay.