Functional Skills Maths | Level 2
Non-Calculator Scaffolded Paper 1

1. Bill is a builder.

On Monday he made mortar mix.

He used 24kg of sand and 5kg of cement.

On Tuesday Bill makes the same type of mortar mix.

He will use 36kg of sand.

    a. Divide Tuesday's amount of sand by Monday's amount of sand (you could simplify this first).

    b. Multiply the amount of cement on Monday by the answer to part a to find the amount of cement Bill will need on Tuesday.

2. Lizzie buys 3 clocks for a total cost of £50 at a car boot sale.

She sells two of the clocks for £22 each and the other clock for £20.

Lizzie thinks she has made a profit of over 30% of the cost of the clocks.

     a.   What is the total amount of money Lizzie made from the sale of the clocks?
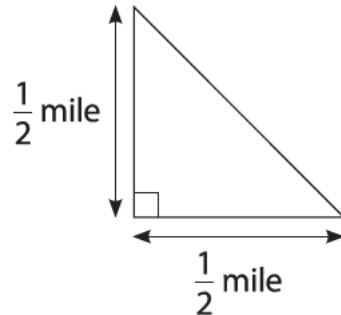
     b.   What is 10% of £50?

     c.   What is 30% of £50?

     d.   Is Lizzie correct? Show why you think this?

3. Usha is a local councillor.

She wants to write about a new housing development.

The diagram shows the space for the new development.

Usha thinks that the area of the development will be greater than the total area of 50 football pitches.

Usha knows:

- A football pitch is rectangular 100m by 50m.
- 1 mile = 1600m

a. How long are the two sides of the triangle in metres?

b. What is the formula for the area of a triangle?

c. What is the area of the triangle in m^2?

d. What is the formula for the area of a rectangle?

e. What is the area of one football pitch in m^2?

f. What is the area of 50 football pitches?

g. Will the area of the development be greater than the area of 50 football pitches?

h. Use a reverse calculation on two of your workings out above to provide a check of your answer.