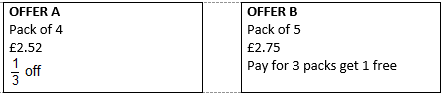
**End of Unit Test** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ratio and Proportion - HIGHER**

1) Here are two offers for batteries.



Zak wants to buy 40 batteries. Which is the cheaper offer? You must show your working.

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

Answer ......................................................................

**(Total 5 marks)**

2) Laura buys a saddle in the UK for £950. Delivery is free.

Steve buys the same saddle from Holland for 990 Euros. He pays 30 Euros for delivery.

£1 = 1.10 Euros

Including the delivery charge, whose saddle is cheaper? You must show your working.

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

Answer ......................................................................

**(Total 3 marks)**

3) To complete a task in 15 days a company needs 4 people each working for 8 hours per day.

The company decides to have 5 people each working for 6 hours per day.

Assume that each person works at the same rate.

(a) How many days will the task take to complete? You must show your working.

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

…………………………………………………………………………………………………

Answer ............................................

**(3)**

(b) Comment on how the assumption affects your answer to part (a).

…………………………………………………………………………………………………

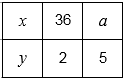
…………………………………………………………………………………………………

…………………………………………………………………………………………………

**(1)**

**(Total 4 marks)**

4) is directly proportional to



Work out the value of a.

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

Answer ............................................

**(Total 4 marks)**

5) W is inversely proportional to x.

When W = 6, x = 20

Work out the value of W when x = 24

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

…………………………………………………………………………………………………………

Answer ......................................................................

**(Total 4 marks)**

**(Total for test = 20 marks)**