



Aberdare Community School  
Mathematics Department

WJEC GCSE

**Higher – Calculator**

Number

# **Number - end of paper questions**

Name: .....

Set: .....

Date: .....

Teacher: .....

12. Machine A is three times as quick as Machine B in assembling identical circuit boards. Machine A is allocated two and a half times as many of these circuit boards to assemble than is allocated to Machine B.

Machine B took 4 hours to assemble all of its allocation.

How long did it take for Machine A to complete its allocation? Give your answer in hours and minutes.

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13.



'Ace Clothing UK' design and make T-shirts.

The company has found that sales of their T-shirts have trebled each year from 2009 to 2012. In 2009, 'Ace Clothing UK' sold 2300 T-Shirts.

- (a) Calculate the **total** number of T-Shirts sold by 'Ace Clothing UK' from the start of 2009 to the end of 2012.

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- (b) At the end of 2009, 'Ace Clothing UK' decided that each year they would increase the price they would charge for their T-shirts. It was decided that the increase each year would be 12% of the **previous year's price**. This would continue for the next 3 years. 'Ace Clothing UK' charged £3.60 for each of their T-shirts during 2012.

Calculate the price that 'Ace Clothing UK' charged for each of their T-shirts during 2009, correct to the nearest penny.

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