**Problem-Solving with Worded Formulae (Print to A3)**

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| Here is information about the cost of sending a parcel to Europe by Parcel Link.

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| Next day delivery | £19.00**Plus**70p for each kg more than 5 kg |
| 3 day delivery | £16.00**Plus**50p for each kg more than 5 kg |

Kate is going to send a parcel to Europe by Parcel Link. The parcel weighs 12 kg. Kate can send the parcel using next day delivery or using 3 day delivery.(a)  Work out the difference in the two costs.£...........................................................**(3)**Adam sends a parcel to Europe by Parcel Link. He uses 3 day delivery. The cost is £25(b)  Work out how many kilograms Adam's parcel weighs............................................................ kg**(3)****(Total for question = 6 marks)** | Angela and Michelle both work as waitresses at the same restaurant. This formula is used to work out the total amount of money each waitress gets.

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| **Total amount** = £6.50 x number of hours worked + tips |

The table shows the number of hours Angela and Michelle each worked last Saturday. It also shows the tips they got.

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|  | **Number of hours worked** | **Tips** |
| **Angela** | 8 | £12 |
| **Michelle** | 7 | £15 |

Who got the higher total amount of money last Saturday? You must show clearly how you got your answer.**(Total for question = 4 marks)** | You can use these rules to change temperatures from °C to °F.

|  |  |
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| **Approximate rule** | Multiply the °C temperature by 2 and then add 30 |
| **Exact rule** | Multiply the °C temperature by 1.8 and then add 32 |

Amy uses the **approximate rule** to change 20°C to °F. Dan uses the **exact rule** to change 20°C to °F.(a) Work out the difference between Amy's result and Dan's result............................................................°F**(4)**Jade uses the **approximate rule** to change a temperature from °C to °F. The result is 110°F.(b) What °C temperature did Jade change to °F?...........................................................°C**(3)****(Total for question = 7 marks)** |