Numeracy Assessment Revision

Percentages

1. Increase £300 by 40%.

2. Vat is charged at 17.5%. A car is advertised as costing £10 800 + VAT. Find the cost of the car.

3. A baby goods shop had a sale advertising 30% off all items. Find the cost of a pram which originally cost £360.

4. A man weighed 210 lb before staring a diet. If he lost 8% of his weight, how heavy is he now?

Money

5. The exchange rate on Tuesday was £1 = 1.26 euros. Calculate how many euros I would get for:
   a) £600  
   b) £2400  
   c) £98 at this rate.

6. I buy a washing machine using hire purchase. The deal I am offered means I have to pay a deposit of £65.20 and then 6 installments of £42. How much will the washing machine cost me in total?

7. There are two payment plans on offer for a mobile phone:

<table>
<thead>
<tr>
<th>Plan A</th>
<th>Plan B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposit £145</td>
<td>Deposit £64</td>
</tr>
<tr>
<td>12 payments of £24.50</td>
<td>24 payments of £18.60</td>
</tr>
</tbody>
</table>

Which of these offers the cheaper deal? Justify your answer using calculations.

8. A group of 126 fans are travelling to a concert using hired vans. There are two possible sizes of van:

   Large Van: 24 seats at a cost of £80 per van.
   Small Van: 15 seats at a cost of £60 per van.

Which combination of vans would be the cheapest?

Speed, Distance and Time

9. Copy and complete the timetable below:

<table>
<thead>
<tr>
<th>Depart</th>
<th>Arrive</th>
<th>Time Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:45</td>
<td>13:10</td>
<td></td>
</tr>
<tr>
<td>14:25</td>
<td></td>
<td>6 hours 20 mins</td>
</tr>
<tr>
<td></td>
<td>19:00</td>
<td>8 hours 55 mins</td>
</tr>
</tbody>
</table>

10. A car travels at a constant speed of 56mph for half an hour. How far would it travel in this time?
11. A bus covers a distance of 26 kilometres in 15 minutes. How fast is it travelling in kmph?

12. How far would I get if I ran for 2 ½ hours at a constant speed of 10 kmph?

**Ratio**

13. Tom and Jerry’s pocket money is divided in the ratio of 5:2. If they are given a total of £28, how much did each get?

14. To get the correct shade of paint for a room the ratio of pink to white paint is mixed in the ratio of 13:7. How much of each shade of paint would be needed to fill a 5 litre tin?

**Pie Charts and Probability**

15. In a survey of favourite island holiday destinations the results below were obtained.

![Pie Chart](image)

If 1260 people were questioned in the survey, how many of them chose

a) Tenerife?
b) Majorca?

16. In a survey of consoles, the results below were obtained.

![Pie Chart](image)

If 540 people were questioned, how many of them chose the X-Box?

17. A charity launched two prize draws.

<table>
<thead>
<tr>
<th>Draw 1</th>
<th>Draw 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 winning tickets</td>
<td>250 winning tickets</td>
</tr>
<tr>
<td>250 tickets sold</td>
<td>1600 tickets sold</td>
</tr>
</tbody>
</table>

In which draw were you most likely to win a prize? Justify your answer with calculation.

18. In an inter-house competition the results are as follows:

Hogwarts: 10 wins out of 15 matches  
Slitherin: 12 wins out of 21 matches  
Hufflepuff: 8 wins out of 14 matches  

Which house has the best winning record overall? Justify your answer with calculation.