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:

Plan A   Plan B

Deposit £145   Deposit £ 64
12 payments of £24.50   24 payments of £18.60

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:

Depart	Arrive	Time Taken
11:45	13:10	
14:25		6 hours 20 mins
	19:00	8 hours 55 mins

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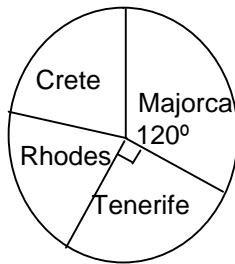
11. A bus covers a distance of 26 kilometres in 15 minutes. How fast is it travelling in kmph?

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?
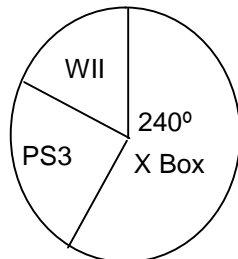
Pie Charts and Probability

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

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.

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

17. A charity launched two prize draws.

Draw 1   Draw 2
35 winning tickets   250 winning tickets
250 tickets sold   1600 tickets sold

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.