## <u>National 4</u> <u>Practice Numeracy Test 1</u>



1. Jim bought a new laptop. The price has been reduced in a sale by 30%.

It originally cost £600. How much does it cost now?

2. An empty box weighs 300g. After 40 cans of juice are added, the new weight is 17900g.

How much does one can weigh?

3. Bob is going to America on holiday. He has £650 spending money saved up.

How much currency will he get if the exchange rate is  $\pounds 1 = \$1.49$ ?

4. Complete the following table which shows departure and arrival times for different bus journeys

<b>Depart</b>	Arrive	<u>Time Taken</u>
1035	1120	
1910		3h 55mins
	1800	6hr 45 mins



5. The diagram shows an aerial view of a farmer's field which is made up of 2 rectangles.



The farmer bought 110m of fencing to try and surround the outside of the entire field.

Does he have enough fencing? <u>Justify your answer by</u> <u>calculation.</u>

6. A van travels at an average speed of 48 km/h for 45 minutes.

How far does it travel in this time?



7. A bag contains yellow counters and red counters in a ratio of 3:2.

There are a total of 35 counters in the bag. Jimmy guess 24 of them are yellow. Was his guess correct?

8. A liquid increases in temperature from -3°C to 8°C.

By how many degrees has the temperature increased?

9. How much more water is there in jug A compared to jug B?



10. Two shops are selling the same PC. They are offering them for sale with different deals

<u>Shop A</u>

Deposit £200 Six payments of £48.95 <u>Shop B</u>

Deposit £250 Six payments of £41.55

Which shop has the cheaper deal? **Justify your answer by calculation.** 



12. A school trip to Alton Towers is taking 185 pupils. The bus company offers 2 sizes of bus.

Size A: 45 seats Cost £250 Size B: 25 seats Cost £150

The school want to keep the hire costs as low as possible.

- a) How many of each bus should they hire?
- b) How much will this cost?
- 13. A survey at a sports club showed there were 120 members in total. The pie chart show the proportion of members who favoured a particular activity



How many people prefer football?

<u>Bank</u>	<u>Less than</u> <u>£1000</u>	<u>Between</u> <u>£1000 and</u> <u>£4000</u>	<u>More than</u> <u>£4000</u>
Α	8.0%	8.1%	7.2 %
В	7.2%	7.2%	7.1%
С	10.4%	9.8%	6.2%
D	24.4%	18.4%	12.4%

14. The table below shows the interest rate charged on loans by 4 different banks.

Which bank charges the least interest on a loan of £2500?

15. The bar graph below shows the number of pupils in Mr Crawford's classes that have school dinners.



- a) How many 2<sup>nd</sup> year boys had school dinners?
- b) Compare the use of school dinners by both boys and girls across the year groups.

16. Three mobile phone companies have contracts available at the same price.

	Company A	<b>Company B</b>	Company C
Calls (mins)	200	300	250
Texts	1200	900	800
Internet (Mb)	250	200	275

Barbara is looking for a mobile phone which will give her 4 hours of calls, 600 texts and 250 Mb of internet use.

Which company should she pick?

17. Two different football teams are holding raffles to give away tickets for a game.

Team A have had 110 entries and have 25 tickets to give away. Team B have had 80 entries and have 19 tickets to give away.

Which club's supporters have a great chance of winning in the raffle? **Justify your answer by calculation.** 

18. Thomas, Steven and Paul all play in a badminton league.

Thomas has won 5 out of 9 games. Steven has won 7 out of 11. Paul has won 10 out of 17 games.

Which player has the best winning record? **Justify your answer by calculation.**