



# **St Anselm's College Maths Sample Paper 1**

**45 mins**

**No Calculator Allowed**

1) Write the following numbers in words.

a) 13 060 125 .....

.....

b) 52 070 .....

2) Write down all the numbers **smaller** than 90 which are multiples of both 6 **and** 9.

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3) Look at the train timetable below.

LIVERPOOL MOORFIELDS	8.01	8.16	8.31	8.46
LIVERPOOL LIME STREET	8.03	8.18	8.33	8.48
LIVERPOOL CENTRAL	8.05	8.20	8.35	8.50
LIVERPOOL JAMES STREET	8.07	8.22	8.37	8.52
BIRKENHEAD HAMILTON SQUARE	8.10	8.25	8.40	8.55
BIRKENHEAD CONWAY PARK	8.12	8.27	8.42	8.57
BIRKENHEAD PARK	8.14	8.29	8.44	8.59
BIRKENHEAD NORTH	8.17	8.32	8.47	9.02
WALLASEY VILLAGE	-	8.37	-	9.07
WALLASEY GROVE ROAD	-	8.38	-	9.08
NEW BRIGHTON	-	8.43	-	9.13
BIDSTON	8.20		8.50	
LEASOWE	8.22		8.52	
MORETON (MERSEYSIDE)	8.24		8.54	
MEOLS	8.28		8.58	
MANOR ROAD	8.30		9.00	
HOYLAKE	8.32		9.02	
WEST KIRBY	8.37		9.07	

a) I need to catch a train from Birkenhead Park to arrive at Meols by 9.00. What time train should I catch?

.....

b) I catch the 8.37 train from Liverpool James Street to Hoylake. How long does the journey take?

.....

4) I buy 12 items which cost £3.05 each.

a) What is the total cost?

.....

b) If you worked out the answer to part (a) on a calculator, what would the display show?

.....

5) A pencil is measured as 7.8 cm long. How long is the pencil in these units,

a) in mm.....

b) in m.....?

6) I start watching a film at 7:45pm and turn the television off at 9:35pm. For how long was I watching television?

.....

.....

7) Solve the following:

a) I think of a number, multiply it by 9 and subtract 7. The result is 101. What was the number I first thought of?

.....

b) There is a number,  $x$ . When I add 8 to  $x$  then multiply the answer by 6, the overall result is the same as just multiplying  $x$  by 18. What is  $x$ ?

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8) Write the next two numbers for each of the following sequences.

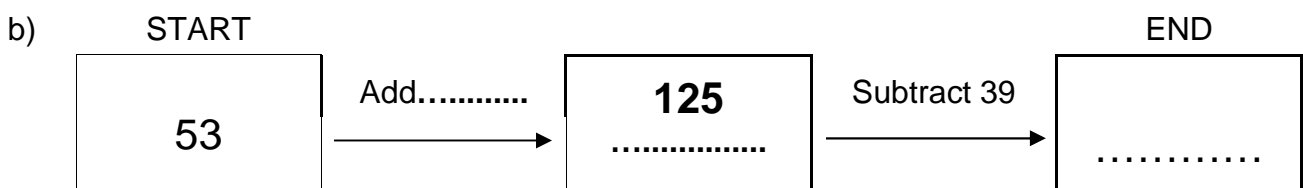
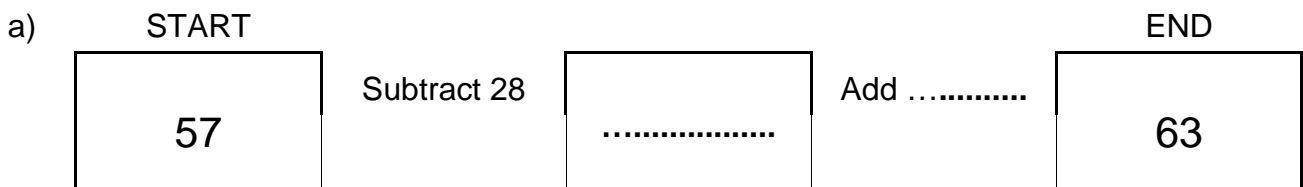
a) 1 7 13 19 25 ... ..

b) 1 2 4 8 16 ... ..

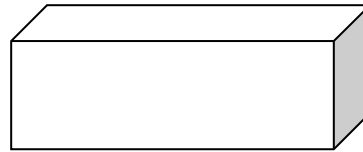
c) 1 4 9 16 25 ... ..

d) 1 2 5 14 41 ... ..

9) Complete the spaces shown by dotted lines below.



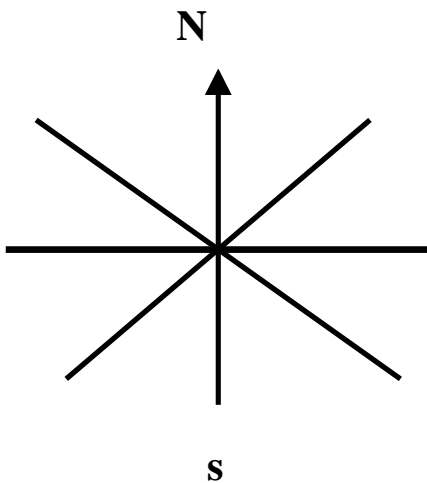
10) Write the name of the following 3-dimensional shapes underneath them.



a) .....

b).....

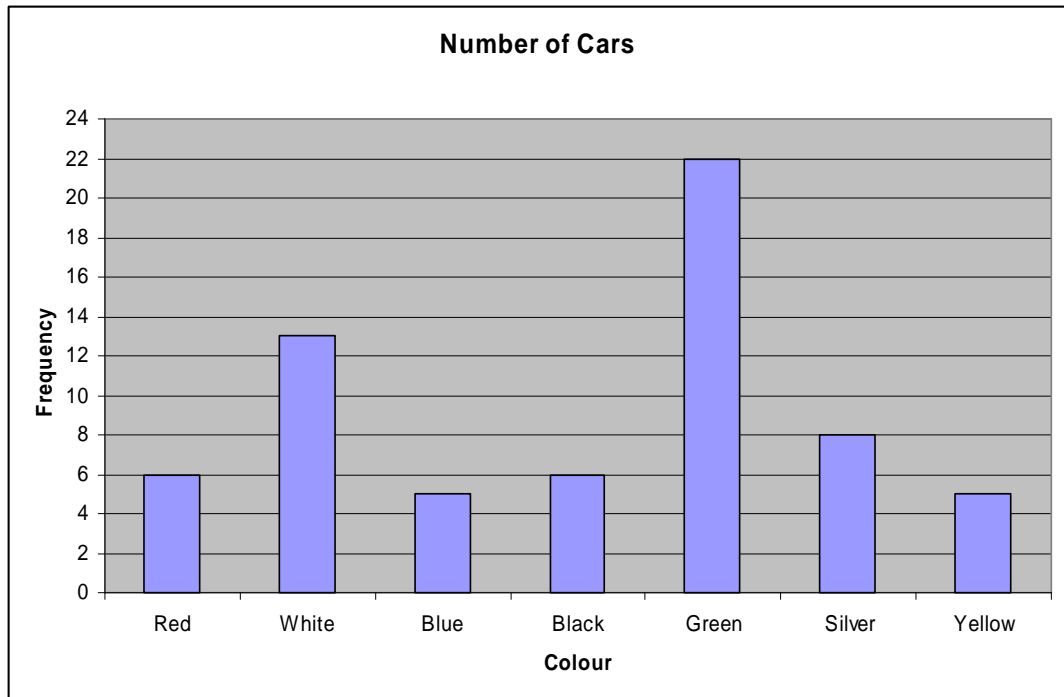
11) Complete the diagram to show the 8 points of the compass.



Imagine you are facing South East. If you turn through  $270^\circ$  clockwise, which way are you facing?

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12) Look at the chart below which shows the number of cars of different colours passing the gate of St Anselm's this morning.



- a) How many white cars passed the gate?.....
- b) How many cars passed the gate altogether?.....
- c) Which colour of car is the mode?.....

13) Tickets for the cinema cost £6.30 for adults and £3.40 for children.

- a) How much would it cost for 6 adults to go to the cinema?

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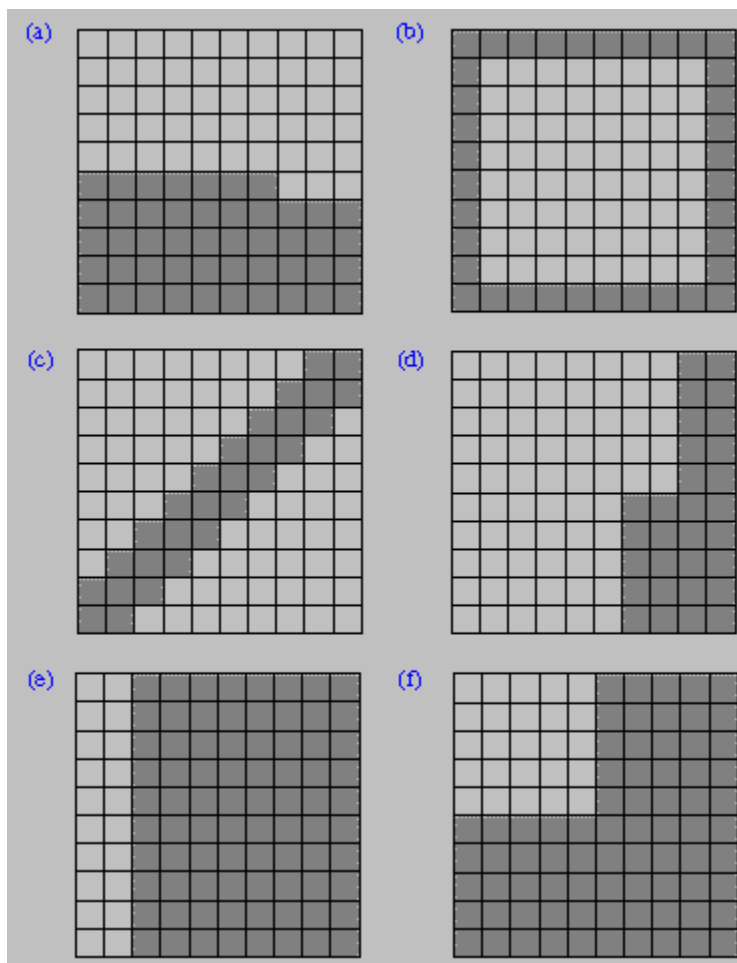
b) How much would it cost for 3 adults and 4 children?

.....  
.....

c) What is the maximum number of people that can go to the cinema for £20?

.....  
.....

14) Look at the grids below.



a) Which grids are more than 50% shaded?

.....

b) What percentage of grid (c) is shaded?

.....

c) What fraction of grid (d) is shaded? Give your answer in its simplest form.

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15) In a tin of Quality Street, 12% are Coffee Crèmes. If the tin has a total of 250 chocolates, how many are **not** Coffee Crèmes?

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16) Round each of the following numbers to the accuracy given in brackets.

a) 19.82 (nearest whole number)

.....

b) 120400 (nearest thousand)

.....

c) 33.45789 (nearest tenth)

.....



17) Write the following numbers in order of size, starting with the smallest.

0.26      0.3      0.038      0.38      0.308

.....

18) If a fair die is rolled, which of the following outcomes is least likely? Circle your answer.

- a) A score of more than 4
- b) A score of less than 5
- c) A score that is an odd number.

19) I have a bag containing red, blue and white counters. A counter is chosen at random from the bag. There are 18 white counters in the bag and the probability of choosing a white counter is  $\frac{1}{2}$ . The bag contains 14 red counters. How many blue counters are there in the bag?

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.....

20) Which of the following distances is the most likely height of a man? Circle your answer.

- a) 120 cm
- b) 150 mm
- c) 1.8 m
- d) 112 inches

21) A calculator costs £1.75. In 1979 the same calculator cost 24 times as much. How much did the calculator cost in 1979?

.....  
.....

22) Look at the list of numbers below.

6      12      15      49      52      53      96

a) Which of the numbers has an **odd** number of factors?  
(Hint: there is only one)

.....

b) Give another example of a number with an odd number of factors.

.....

c) These numbers have a special name. What is it?

.....

d) Which of the numbers is a prime number?

.....

23) Number A =  $5 \times$  Number B and Number B =  $2 \times$  Number C

a) What fraction of Number A is Number B?

.....

b) How many times bigger than Number C is Number A?

.....

c) What fraction of Number B is Number C?

.....

d) Give three possible values of the numbers.

A =

B =

C =

24) In November 2007 Becky is six times Anna's age and Mary is four times Anna's age.

In November 2009 Anna is a quarter of Becky's age. Mary is six years younger than Becky.

How old are the three girls in November 2009?

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.....  
.....