Name:......No:.....course:.....

1)

The lengths of 30 trout were measured to the nearest cm. The following data was obtained:

Length (cm)	30 - < 32	32-<34	34-<36	36 - < 38	38 - < 40	40-<42	42-<44
Frequency	1	1	3	7	11	5	2

a) Find the Quartiles

b) Find the standard deviation

**2)** We need to form a 6 a side team in a class of 14 students. How many different teams can be formed?

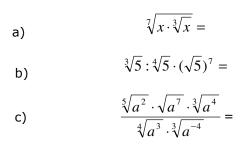
**3)** A bag contains 3 red, 4 green and 3 yellow marbles. Two of these marbles are randomly drawn from the bag. What is the probability that they are of

(i) the same colour

(ii) different colours(one of each colour)

**4)** 43% are wearing seatbelt and 57% are not wearing seatbelt. Randomly pick 2 people. What is probability that both will be wearing seatbelt

5) Find and simplify using only radical properties:



**6**) Express with integer denominator, (simplify your answer):

a) 
$$\frac{3}{4\sqrt{3}-\sqrt{6}}$$
 b)  $\frac{2\sqrt{2}-\sqrt{5}}{\sqrt{11}-3\sqrt{3}}$ 

**7)** Simplify:  $4\sqrt{7} - 8\sqrt{63} + 12\sqrt{175} - 2\sqrt{252} =$ 

8) Divide

$$(2x^4 - x^3 - 2x^2 + 12x - 9):(2x^2 - 3x + 5)$$

**9)** Find "m" if we know that the remainder in the following division is 3  $x^3 + (2m-1)x^2 - 3x + (1-m)$  : (x+1)

1	2	3	4	5	6	7	8	9
2	0.5	1	1	1.5	1	1	1	1