Welham Girls' School

Sample Question Paper – Mathematics
For Admission to Class 7

Sample Question Paper is not a prototype of the Test paper

Time: 1 Hour   *(All calculations and work must be clearly shown in the margin provided next to each question)*   **MM: 100**

Q.1 | **Answer the following questions in the space given below.** *(Each Question carries 2 Marks)* | **(18)**

(a) Divide: $-54x^4y^2z^3$ by $3x^2y^2z$	(b) Find the ratio between 3.75 **kg** and 750 **gm**.	(c) Convert: $\dfrac{3}{7}, \dfrac{4}{5}, \dfrac{1}{3}$ into like fractions.
Your Answer	**Your Answer**	**Your Answer**
(d) Write down the supplement of 0.2 times of a straight angle.	(e) Find the volume and surface area of a cube whose edge is 1.1 **m**.	(f) Write down prime numbers from 1 to 50 whose unit digit is 7.
Your Answer	**Your Answer**	**Your Answer**
(g) What least number should be added to 23275 so that the resultant number is divisible by 6 ?	(h) Express $166\dfrac{2}{3}\%$ as a fraction.	(i) Divide the smallest 5 digit number by 29.
Your Answer	**Your Answer**	**Your Answer**

Rough Work

Q. 2	**Answer the following questions:** (*Each question carries 3 marks*)		(36)

	(a) A man left 20% of his money for his wife, 50% of the remaining for his daughter and the remaining ₹. 9000 for his brother. How much money did he leave?	(b) In how many years will a sum of money triple itself, the rate of interest being 5% p.a.?	**Rough Work**
	(c) Solve for x :. $-2 = \dfrac{x}{3} - 3$	(d) Find the product of: $(12x - 9y)(4x - 5y)$	

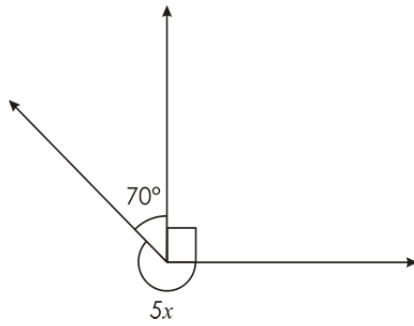|	
(e) Using a ruler and compass, construct an angle of 75°.	(f) Sangita bought some oranges @ 3 oranges for ₹. 2 and sold them @ 2 oranges for ₹. 3. Find her profit % or loss%.
(g) Find the least number which when decreased by1 is exactly divisible by 21,45,63,81.	(h) After travelling 100 km, Reah found that $\dfrac{1}{3}$ of the journey was still left. How much was the length of the whole journey?

Rough Work

(i) A car can go 16.8 km using one litre of petrol. How many kilometers will it go in 3.7 litres of petrol?

(j) Write down the decimal indicated by the arrow :-

5.55   5.6   5.65   5.7

(k) If b = 6, c = 4 & X = -2 find the value of:

(i) $x^2 + b^3 - 3c$

(ii) $x(2b + c - 5)$

(l) Find the ratio of the price of a pencil to that of a ball pen, if pencils cost ₹. 50 per score and ball pens cost ₹. 96 per dozen.

Q.3	**Answer the following questions:** (*Each question carries 4 marks*)		(40)

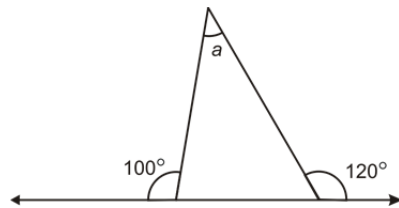|	(a) Find the H.C.F. of 108 & 450. Now; use the H.C.F. obtained to find the L.C.M. of the given numbers 108 & 450.	(b) The area of a square field is 0.49 hectare. Find: i) The side of Field. ii) The perimeter of the Field. iii) How much distance will a boy cover in taking 10 rounds of the field?	**Rough Work**
	(c) 160 men can repair a road in 40 days. How many more men should be employed to repair it in 10 days?	(d) The average of 6 results is 8.The average of the first 2 results is 7.5.What is the average of the remaining 4 results?	

(e)	What sum will amount to ₹. 13000 in 3 years @ 10% per annum simple interest?	(f) From the sum of $x^2 - xy + 2y^2$, $5x^2 + 8xy - 3y^2$, $7x^2 - 8xy + 9y^2$ Subtract $11x^2 - 13xy + 9y^2$
(g)	The cost of leveling a rectangular field at the rate of 85 paise per sq.m is ₹. 624.75. Find the perimeter if its sides are in the ratio 5:3.	(h) A man leaves ₹. 1,28,000 to this three children A,B & C in the ratio 4:5:7. How much does each child receive?

(i) Find the unknown angle (Give reasons)

(1)

70°

5x

(2)

a

100°   120°

(j) A dealer sells two office tables for ₹ 3000 each. He gains 20% on one table & loses 20% on the other. What is his gain or loss on the whole transaction?
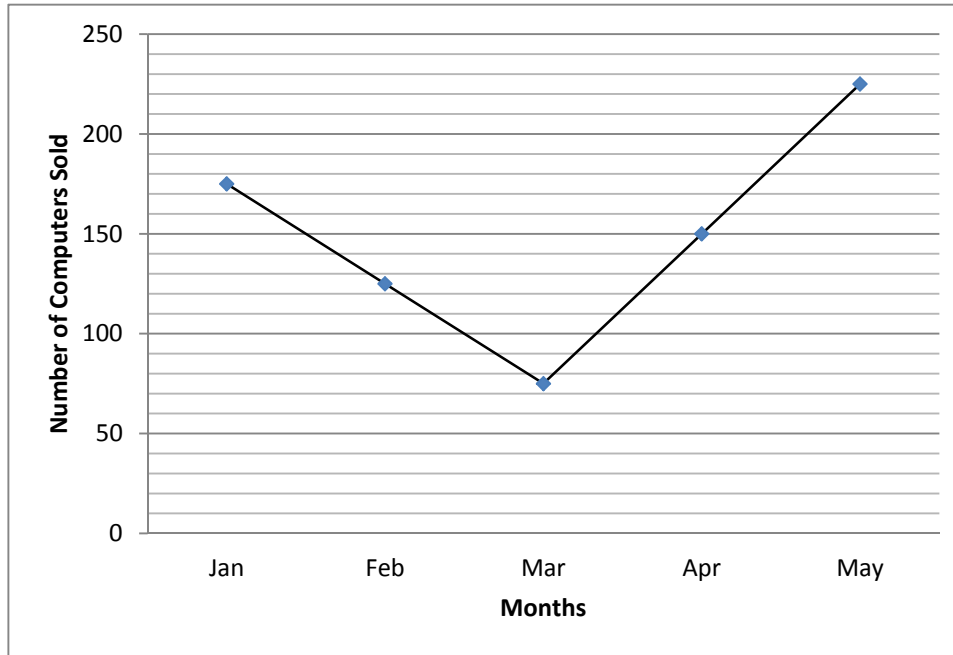
| Q. 4 | The graph below shows the number of computers sold by M/s. Computer Guru in the first 5 months of the year. Now study the graph carefully and answer the following questions. **(6)** | **Rough Work** |

(a) Find the total sale of computers. ....

(b) Express the sale of computers in the month of March as a percentage of the total sale. ....

(c) How much did the sale of computers increase from March to May? ....

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