The City School

Past Paper Questions

(Ratio, Rate and Proportion)

MATHEMATICS





Fill in the blanks. 01. two-fifth of 70 is			
			
Encircle the correct option. 01. Increase Rs 30 in the ratio of 6:4			
A) 15 B) 45 C) 2	18	D) 20	
02. Simplest form of 24:42 is:	10	<i>D</i> / 20	
A) 4:7 B) 2:5 C) 1	1:7	D) 9:8	
03. On a map, a distance of 40 km is represented by a 2cm line. What is the scale of the map?			
	1: 20 000	D) 1:2000	
04. The simplified form of the ratio 6:2	7:45 is		
A) 2:9:15 B) 2:5:15 C) 5	5:3:15	D) 15:9:2	
05) Ratio of 12 kg to 2000g is:			
A) 600:1 B) 1:6 C) 60:1 D) 6:1			
06) In what ratio must 49 be decreased			
A) 3/7 B) 7/3 C) 3		D) 7	
07) If 4 books cost \$28 then 20 such bo		- .	
A) \$50 B) \$20 C) \$	>70	D) \$140	
Questions			
Q no 01) Work out the cost of the follo	wing when fo	our cups of soup cost \$8	8
I. Five cups		II. Eight cups	
Q no 02) Simplify these ratios			
I. 2:10:12 II. 32:8:64		III. 12:16	IV. 1 hour 20 minutes: 4 hours
Q no 03) A school has 20 teachers and	480 students		
I. What is the teacher: student ratio? II. Convert ratio in its simplest form.			
Q no 04) A map has a scale 1cm to 5m. I. What is the actual length which is 3.5 cm on the map?			
II. What length will represent 250m on map?			
Q no 05) Divide 250 in the ratio 3:2			
Q no 06) A rectangular metal sheet is 10.5 m long and 1.5 m wide. Calculate			
I. The ratio of its length to its width in simplest form.			
II. Ratio of its length to its perimeter.			
III. If the cost of 1 square meter of metal sheet is \$30, find the total cost of the sheet.			
Q no 07) A man can build a room in 10 days. How long will it take if 8 men build the same room?			
Q no 08) Divide 405 m in the ratio 3:7:7:10			
Q no 10) A picture measuring 15cm by 75cm is enlarged in the ratio 8:5. Find the new dimension.			
Q no 11) A tap can fill a bath in 12 minutes and another tap can do so in 24 minutes. How long will they take running together?			
Q no 12) A man earns \$576 in a 6-day week. What is his pay for 4 days?			
Q no 13) Four men can renovate a house in 12 days. How long would it take seven men?			
Q no 14) 5 kg of beef cost Rs 1450. Calculate the cost of 8kg of beef.			
Q no 15) 480 km in the ratio of 7:5			
Q no 16) Find p: q if 3p = 5q	s in the state	d ratios	
Q no 17) Divide the following quantitie I. Rs 605 in the ratio of 4:1		n in the ratio of 5:1	III. 216 in the ratio of 1:4:10
Q no 18) State whether each of the following is an example of direct proportion, inverse proportion or neither.			
I. Cost of one stamp. Cost of a number of the same stamp			
II. Age of a child. Size of the child's shoes.			
III. The length of a video tape and the number of the half-hour programs that can be recorded on it			
Q no 20) A school has 25 teachers and 750 students. Write the teacher: student ratio in its simplest form.			
Q no 21) A bag of sweets has yellow, green, red and purple sweets in the following ratio:			
Yellow: green: red: purple = 2:3:5:1. There are 15 red sweets.			
I. How many sweets are there altogether? II. How many sweets are yellow?			
Q no 22) 3 painters take 4 days to paint the outside of the house.			
I. How long would it take 6 painters to paint the same house at the same rate?			

II. How many painters would be needed to paint three similar houses in 4 days?