## **DELHI PUBLIC SCHOOL, JAMMU REVISION SHEET FOR PT-III SESSION (2017-18)**

Class: VII **Sub: Maths** 

Topics: Simple Equations, Rational Numbers, Comparing Quantities, Congruence of Triangles.

Q1: In	<u>a</u> 3	+5 = 2, the value of a is						
a)		9	b)	<b>-9</b>	c)	1	d)	6

Q2: Which of the following numbers lies between 0 and 1 on a number line?

a) 
$$\frac{3}{4}$$
 b)  $\frac{4}{3}$  c)  $\frac{11}{6}$  d)  $\frac{9}{5}$ 

Q3: The ratio 2:3 means in percent

a) 12 b) 18 c) 13 d) Q5: If 
$$\triangle$$
 ABC  $\stackrel{\sim}{=}$   $\triangle$  KLM, write the parts that correspond to

Q5: If 
$$\triangle$$
 ABC  $\equiv$   $\triangle$  KLM, write the parts that correspond to a)  $\angle$  L b) AC

Q6: One of the angles of an Isosceles triangle is 70°Find the other two angles which are equal.

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Q7: The length of a rectangle is 3 times its width. If the perimeter is 84 cm, then find the length of the rectangle.

Q8: Find the solution of the given equations:

a) 
$$3(t-3) = 4(2t+1)$$
  
b)  $9x + 5 = 4(x-2) + 8$   
c)  $\frac{7m}{5} = m - 4$ 

Q9: By subtracting 22 from 3 times a number, we obtain 68. Find the number.

Q10: Sum of 3 consecutive numbers is 24. Find the numbers. (Hint: Take the nos. as x, x+1 and x+2

Q11: By what number should we multiply  $\frac{-1}{6}$ , so that the product is  $\frac{-23}{9}$ .

Q12: Subtract the sum of  $\frac{-5}{7}$  and  $\frac{15}{14}$  from  $\frac{9}{28}$ .

Q13: From a rope 20m long, pieces of equal sizes are cut, each measuring  $\frac{5}{4}$  m. How many pieces are cut off? How much rope is left?

Q14: Simplify: a) 
$$\left\{ \frac{-11}{3} \right\} + \left\{ \frac{-3}{4} \right\} + \left\{ \frac{-11}{6} \right\} + \frac{3}{8}$$
  
b)  $\left\{ \frac{-8}{7} \right\} + \left\{ \frac{-4}{9} \right\} + \left\{ \frac{-11}{7} \right\} + \frac{5}{6}$   
Q15: Find  $(x + y) \div (x - y)$  if i)  $x = \frac{2}{3}, y = \frac{3}{2}$  ii)  $x = \frac{1}{4}, y = \frac{3}{2}$ 

Q16: Find the distance whose  $3\frac{1}{3}$  % is 3 km.

Q17: The price of the book is increased by 12%. If its increased price is Rs. 145.60, find the original price.

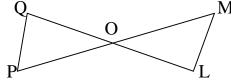
Q18: Harish deposited Rs.7500 in a finance company which pays 15% per annum. Find the amount Harish is expected to get after  $5\frac{3}{4}$  years.

Q19: Are 18,72, 288 in a continued proportion.

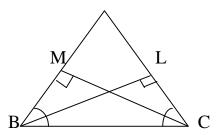
Q20: The ratio of the income to the expenditure of family is 8 : 5. Find the savings, if the income is Rs. 48,000.

Q21: Divide Rs. 1500 among A, B, C in the ratio 2:5:3.

Q22: In the given figure, lines PM and QL bisect at O and OP = OM = 5 cm. Prove that  $\triangle$  POQ  $\stackrel{\sim}{=}$   $\triangle$  MOL. Q

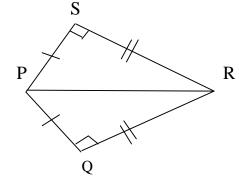


Q23: In  $\triangle$  ABC,  $\angle$  B =  $\angle$  C, BL and CM bisects  $\angle$  B and  $\angle$  C respectively. Prove that BL = CM.



Q24: In the given figure, PS  $\perp$  SR and PQ  $\perp$  QR, also SR = QR. Show that

- a)  $\triangle$  PSR  $\stackrel{\sim}{=}$   $\triangle$  PQR
- b) PQ = PS



Q25: Find the mean proportional between 18 and 288.

Q26: Find the value of p from the following proportions:

a) 3:p::21:77

b) p:9::30:54

Q27: Find the selling price of an article for which cost price is Rs. 750 and gain is 8%.