INDIAN SCHOOL AL WADI AL KABIR
Class VIII, Mathematics
WORKSHEET (2026-27)
PROPORTIONAL REASONING-2

DESCRIPTIVE TYPE QUESTIONS

Q.1 Find the values of a, b, d if x and y are inversely proportional.

x	2	b	8	128	d
y	a	16	32	c	64

Q.2 The angles of a triangle are in the ratio 2:3:4. What is the measure of the largest angle?

Q.3 Shabnam takes 20 minutes to reach her school, when she travels at a speed of 6 km/h. If she wants to reach school in 24 minutes, what should her speed be?

Q.4 A tank on a building has enough water to supply 20 families living there for 6 days. If 10 more families move in there, how long will the water last?

Q.5 A train moving at a uniform speed of 72 km/h reaches its destination in 20 hours.

a) How long will it take if it runs at the speed of 90 km/h?
b) At what speed must it travel to reach the destination in 24 hours?

Q.6 In a Zoological Park there are 1000 creatures as per the following table given below:

Beast animals	Other land animals	Birds	Water animals	Reptiles
150	400	225	175	50

Represent the above data by a pie chart.

Q.7 There are 720 books in a library. The following pie chart represent the number of books in each category.

Answer the following questions based on the pie chart:

i) How many novels will be there in the library?
ii) Which type of books are read the most?
iii) Which two types of books have the number of readers equal to those readers for fictions?



Q.8 X = 12 when y=4. Find the value of x when y=8 if x is inversely proportional to y.

Q.9 A box contains 120 coins of four different denominations ₹1, ₹2, ₹5 *and* ₹10. The numbers of ₹1, ₹2, ₹5 *and* ₹10 coins are in the ratio 5:2:3:2. Find the total amount of money in the box.

Q.10	**Case Study: The School Garden Project** Three friends Aman, Binny and Chitra started a business together selling handmade items. They invested money in the ratio 3:4:5. After one year, the business earned a total profit of ₹ 2,40,000. The three friends decided to share this profit in the same ratio as their investment. Based on the above information, answer the following questions: i) What is the profit made by each of the three friends? ii) How much more money does Binny get compared to Aman? iii) To represent the share of profit of Aman, Binny and Chitra in a pie chart, find the central angle corresponding to each friend's share.

ANSWER KEY							
1	B=16, d=4, a=128, c=2	2	80°	3	5 km/h	4	4 days
5	(a) 16 hours (b) 60 km/h	6	54°, 144°, 81°, 63°, 18°	7	216 novels, Fiction, Story books and Biography	8	6
9	₹440	10	a) ₹60,000 ₹80,000 ₹1,00,000	10	b)₹20,000	10	iii)90°; 120°; 150°