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

Multiple Choice Questions

Q.1	Which of the following represents an inverse proportion?							
	A	Speed and distance travelled in a fixed time	B	Time taken and speed to cover a fixed distance	C	Time and number of students eating food together	D	Distance and time at constant speed
Q.2	In a pie chart, the total angle at the centre of the circle is:							
	A	360^0	B	180^0	C	90^0	D	120^0
Q.3	A paint color is mixed in the ratio Red : Yellow : White :: 1 : 2 : 4. If you use 20 L of white paint, how much yellow paint is needed?							
	A	5 L	B	40 L	C	8 L	D	10 L
Q.4	11 men can dig $6\frac{3}{4}$ metres long trench in one day. How many men should be employed for digging 27 metres trench of the same type in one day?							
	A	22 men	B	33 men	C	44 men	D	50 men
Q.5	If x and y are in direct proportion and $x_1 = 5$, $y_1 = 15$ and $x_2 = 10$ then the value of y_2 is _____. Here, x_1, x_2 and y_1 y_2 are the values of x and y.							
	A	20	B	25	C	30	D	40
Q.6	In a pie chart showing 360°, if a sector has an angle of 90°, what percentage does it represent?							
	A	20%	B	25%	C	30%	D	35%
Q.7	In the ratio 5 : 7 : 9, if the total is 105, the middle term equals _____.							
	A	25	B	55	C	45	D	35
Q.8	In a survey of 720 students, the ratio of those who like Math, Science, and English is 4 : 3 : 5. If this data is represented on a pie chart, what would be the central angle for the sector representing Math?							
	A	120^0	B	90^0	C	150^0	D	180^0
Q.9	A car takes 4 hours to cover a certain distance at a speed of 60 km/hr. How much time will it take to cover the same distance at 80 km/hr?							
	A	2 hrs	B	3 hrs	C	5 hrs	D	6 hrs
Q.10	The ratio of boys to girls in a school is 5 : 7. If there are 240 students, how many are girls?							

	A	120	B	150	C	140	D	160
Q.11	100 people had food provision for 24 days. If 20 persons left the place, the provision will last for:							
	A	30 days	B	96 days	C	120 days	D	40 days
Q.12	If the ratio 12 : 10 : 8 : 6 is reduced to its simplest form, it becomes:							
	A	6 : 5 : 3 : 4	B	3 : 5 : 4 : 3	C	6 : 5 : 4 : 3	D	6 : 10 : 8 : 6
Q.13	In a pie-chart, the data is displayed as:							
	A	Segment	B	Radius	C	Sectors	D	Circumference
Q.14	x varies inversely with y. When x=6, then y= 8. When x= 8, then value of y is _____.							
	A	8	B	48	C	64	D	6

Q.15 **Case study: Organising a School Exhibition**

A school is organising an exhibition where students are preparing decorative gift bags. Initially, 6 students can complete the work in 8 days. The teacher decides to involve more students to finish the work earlier. The students are divided into two groups in the ratio 2:3 for preparing blue and red gift bags.



i) If 10 more students started working, by how many days will they complete the work?

ii) If the total number of students is 25, find the number of students in each group preparing blue and red gift bags.

iii) If the work has to be completed in 2 days, how many students should work together at the same rate?

ANSWERS

1) B	2) A	3) D	4) C	5) C	6) B	7) D	8) A
9) B	10) C	11) A	12) C	13) C	14) D	15) i) 3 days ii) blue = 10, red = 15 iii) 24 students	