

# INDIAN SCHOOL AL WADI AL KABIR

**Class VIII**, Mathematics

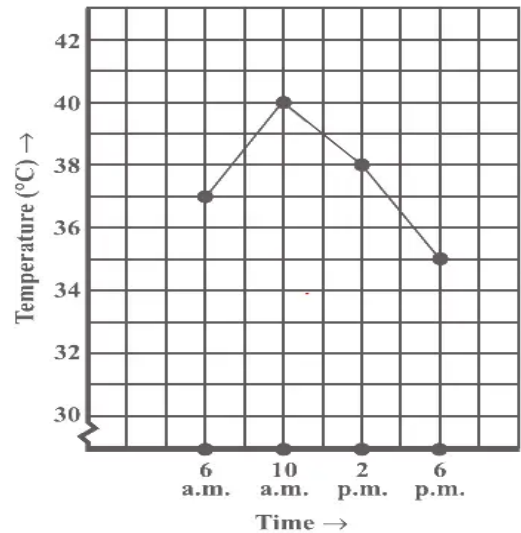
## **Worksheet- INTRODUCTION TO GRAPH**

### OBJECTIVE TYPE (1 Mark)

Q.1	Which of the following points lie on the x-axis?							
	A	(0, 9)	B	(3, 2)	C	(-3, 0)	D	(-1, -2)
Q.2	The abscissa of every point on y-axis is							
	A	1	B	0	C	Any natural number	D	-1
Q.3	Which among the following are the coordinates of the point whose ordinate is -5, abscissa is -12?							
	A	(-12, 5)	B	(5, 12)	C	(-12, -5)	D	(5, -12)
Q.4	State the quadrant in which (8, 12) lies							
	A	Second	B	First	C	Fourth	D	Third
Q.5	If $(2a, 5) = (10, b)$ , then the values of a and b are							
	A	5, 5	B	2, 5	C	10, 2	D	2, 10
Q.6	The coordinates of the origin are							
	A	(1, 0)	B	(0, 1)	C	(1, 1)	D	(0, 0)
Q.7	A graph that displays data that changes continuously over periods of time is called:							
	A	Bar graph	B	Line graph	C	Pie chart	D	Linear graph
Q.8	The coordinate of a point at a distance of 5 units from the x-axis and 2 units from the y-axis is							
	A	(5,5)	B	(5,2)	C	(2,5)	D	(2,2)
<b>SECTION B (3mark)</b>								
Q.9	Plot the following points on the graph sheet: A(2, 1), B(4, 5), C(0, 2.5), D(6, 2), E(3, 0)							
Q.10	Plot the given points on a graph sheet and check if the points lie in a straight line. If not, name the shape they form when joined in the given order.  (a) (4,2), (2,4), (3,3), (5,4).							

Q.11 Read the following graph and answer the questions given below:

- (a) At what time temperature was maximum?
- (b) What is the temperature at 6 PM?
- (c) What is the temperature difference between time 6:00 AM and 6:00 PM?



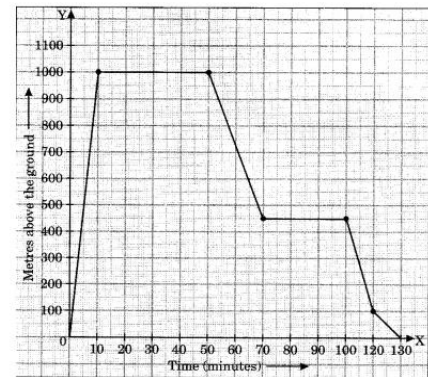
SECTION D (4 MARKS)

Q.12 CASE STUDY:

Manali is a high-altitude Himalayan resort town in India's northern Himachal Pradesh state. Set on the Beas River, it is a gateway for skiing in the Solang Valley and trekking in Parvati Valley. It's also a jumping-off point for paragliding, rafting and mountaineering in the Pir Panjal mountains, home to 4000m high Rohtang Pass.

Hitesh planned a trip with his friends from Delhi to Manali.

The given graph shows the flight of an aeroplane.



- (i) What are the scales taken on x-axis and y-axis?
- (ii) How long was the plane in level flight?
- (iii) What was the speed of the aero plane while rising?
- (iv) How long did the whole flight take?

Q.13 The number of days a city received a rainfall in different years.

Year	2001	2002	2003	2004	2005	2006	2007	2008
Days	10	15	20	25	30	35	40	45

Draw the graph for the above given table of values with suitable scales on the axes. Is it a linear graph?

Q.14	A train is moving at a constant speed of 50 km/h. Draw a distance – time graph. (i) How far will it travel in 2 hours 30 minutes? (ii) Find the time required to cover a distance of 300 km.
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### Answers

<b>Answers</b>	1	C	2	B	3.	C	4	B
	5	A	6	D	7	B	8	C
	10	Triangle	11	a) 10am b) 35°C c) 2°C	12	i) 1 unit = 100, 1 unit = 10min ii) 70mins. iii) 100m/min v) 130min	14	i) 125km ii) 6hours
	13		15		16	(4,0), (0,6)	18	i) $y=7x+3$ ii) ₹5

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