



# INDIAN SCHOOL AL WADI AL KABIR

**Class VIII**, Mathematics

FINAL EXAMINATION REVISION WORKSHEET

## OBJECTIVE TYPE (1 Mark)

<b>Q.1.</b>	The standard form for 0.000064 is							
	<b>A</b>	$64 \times 10^4$	<b>B</b>	$64 \times 10^{-4}$	<b>C</b>	$6.4 \times 10^5$	<b>D</b>	$6.4 \times 10^{-5}$
<b>Q.2.</b>	If $(-5)^{x+1} \times (-5)^5 = (-5)^7$ , the value of $x$ is							
	<b>A</b>	1	<b>B</b>	3	<b>C</b>	6	<b>D</b>	5
<b>Q.3.</b>	$(4^0 + 5^0)(3^2 - 2^3) = \underline{\hspace{2cm}}$							
	<b>A</b>	0	<b>B</b>	9	<b>C</b>	2	<b>D</b>	8
<b>Q.4.</b>	$(x^4)^{-3}$ is equal to							
	<b>A</b>	$x^{12}$	<b>B</b>	$x^{-12}$	<b>C</b>	$x^{64}$	<b>D</b>	$x^{-64}$
<b>Q.5.</b>	$(2^8 \div 2^5)^2 \times 2^{-4}$ is equal to							
	<b>A</b>	$2^2$	<b>B</b>	$\frac{1}{4}$	<b>C</b>	$\frac{1}{8}$	<b>D</b>	8
<b>Q.6.</b>	The value of $\left(\frac{1}{2}\right)^{-2} + \left(\frac{1}{3}\right)^{-2} + \left(\frac{1}{5}\right)^{-2}$							
	<b>A</b>	38	<b>B</b>	100	<b>C</b>	$\frac{1}{10}$	<b>D</b>	1
<b>Q.7.</b>	The value of $3^{-3}$ is							
	<b>A</b>	27	<b>B</b>	6	<b>C</b>	$\frac{1}{27}$	<b>D</b>	$\frac{1}{6}$

<b>Q.8</b>	The usual form for $2.03 \times 10^{-5}$ is							
	<b>A</b>	0.203	<b>B</b>	0.00203	<b>C</b>	203000	<b>D</b>	0.0000203
<b>Q.9</b>	$(-9)^3 \div (-9)^8$ is equal to							
	<b>A</b>	$9^5$	<b>B</b>	$9^{-5}$	<b>C</b>	$(-9)^5$	<b>D</b>	$(-9)^{-5}$
<b>Q.10</b>	$(2^{-2} + 3^{-2} + 4^{-2})^0$ is equal to							
	<b>A</b>	$9^{-2}$	<b>B</b>	0	<b>C</b>	1	<b>D</b>	81

<b>Q.11</b>	The additive inverse of $\frac{-7}{19}$ is						
<b>A</b>	$\frac{-7}{19}$	<b>B</b>	$\frac{7}{19}$	<b>C</b>	$\frac{19}{7}$	<b>D</b>	$\frac{-19}{7}$
<b>Q.12</b>	Find using distributivity: $\left\{\frac{4}{5} \times \left(\frac{-3}{7}\right)\right\} + \left\{\frac{4}{5} \times \frac{4}{7}\right\}$						
<b>A</b>	$\frac{4}{35}$	<b>B</b>	$\frac{-4}{5}$	<b>C</b>	$\frac{3}{35}$	<b>D</b>	$\frac{6}{5}$
<b>Q.13</b>	Name the property used: $\frac{-4}{7} \times 1 = 1 \times \frac{-4}{7} = \frac{-4}{7}$						
<b>A</b>	Multiplicative inverse	<b>B</b>	Additive inverse	<b>C</b>	Additive identity	<b>D</b>	Multiplicative identity
<b>Q.14</b>	The reciprocal of $\frac{2}{5} \times \frac{-4}{9}$ is						
<b>A</b>	$\frac{8}{45}$	<b>B</b>	$\frac{-45}{8}$	<b>C</b>	$\frac{45}{8}$	<b>D</b>	$\frac{-8}{45}$
<b>Q.15</b>	The rational number that lies between $\frac{1}{2}$ and $\frac{1}{3}$ is						
<b>A</b>	$\frac{41}{60}$	<b>B</b>	$\frac{31}{60}$	<b>C</b>	$\frac{23}{60}$	<b>D</b>	$\frac{37}{60}$
<b>Q.16</b>	The correct symbol to fill the blank space in $\frac{3}{11} \text{ --- } \frac{-4}{11}$						
<b>A</b>	<	<b>B</b>	>	<b>C</b>	=	<b>D</b>	None of these
<b>Q.17</b>	Multiplicative inverse of a negative rational number is						
<b>A</b>	Positive rational number	<b>B</b>	Negative rational number	<b>C</b>	0	<b>D</b>	1
<b>Q.18</b>	Name the property illustrated to compute $\frac{3}{7} \times \left(\frac{3}{4} - \frac{4}{5}\right) = \frac{3}{7} \times \frac{3}{4} - \frac{3}{7} \times \frac{4}{5}$						
<b>A</b>	Commutative	<b>B</b>	Associative	<b>C</b>	Closure	<b>D</b>	Distributive
<b>Q.19</b>	Name the property illustrated: $\frac{3}{5} \times \frac{-4}{7} = \frac{-4}{7} \times \frac{3}{5}$						
<b>A</b>	Commutative	<b>B</b>	Associative	<b>C</b>	Closure		Distributive
<b>Q.20</b>	Factorise $x^2 - 10x + 25$						
<b>A</b>	$(x - 5)(x + 5)$	<b>B</b>	$(x - 5)(x - 5)$	<b>C</b>	$(x + 5)(x + 5)$	<b>D</b>	$(x - 3)(x + 5)$

<b>Q.21</b>	$(15x - 35) \div (3x - 7)$ is equal to_____			
	<b>A</b>	5	<b>B</b>	$(3x - 7)$
	<b>C</b>	7	<b>D</b>	$(3x + 7)$
<b>Q.22</b>	Which of the following numbers is a perfect cube?			
	<b>A</b>	100	<b>B</b>	27
	<b>C</b>	49	<b>D</b>	81
<b>Q.23</b>	Cube of a number ending in 7 will end in the digit			
	<b>A</b>	9	<b>B</b>	7
	<b>C</b>	3	<b>D</b>	6
<b>Q.24</b>	$216 = 2 \times 2 \times 2 \times 3 \times 3 \times 3$ , then cube root of 216 is			
	<b>A</b>	3	<b>B</b>	4
	<b>C</b>	6	<b>D</b>	8
<b>Q.25</b>	$\sqrt[3]{27} + \sqrt[3]{125} =$			
	<b>A</b>	3	<b>B</b>	5
	<b>C</b>	8	<b>D</b>	15
<b>Q.26</b>	The smallest number by which 675 must be multiplied to obtain a perfect cube is			
	<b>A</b>	3	<b>B</b>	5
	<b>C</b>	25	<b>D</b>	15
<b>Q.27</b>	The side of the cube whose volume is $729 m^3$ is			
	<b>A</b>	7m	<b>B</b>	17m
	<b>C</b>	19m	<b>D</b>	9m
<b>Q.28</b>	$\sqrt[3]{1000}$ is equal to			
	<b>A</b>	10	<b>B</b>	100
	<b>C</b>	1	<b>D</b>	1000
<b>Q.29</b>	If one side of a cube is 1.5 m in length, its volume will be			
	<b>A</b>	$33.75m^3$	<b>B</b>	$3.375m^3$
	<b>C</b>	$337.5m^3$	<b>D</b>	$3375m^3$
<b>Q.30</b>	The smallest number by which 81 should be divided to obtain a perfect cube is			
	<b>A</b>	9	<b>B</b>	3
	<b>C</b>	6	<b>D</b>	18
<b>Q.31</b>	The diagonals of a rhombus are 6 cm and 4 cm respectively. Its area is			
	<b>A</b>	$36 cm^2$	<b>B</b>	$16 cm^2$
	<b>C</b>	$24 cm^2$	<b>D</b>	$12 cm^2$
<b>Q.32</b>	The parallel sides of a trapezium are 20 m and 15 m long. The distance between these sides is 10 m. The area of the trapezium is			
	<b>A</b>	$160 m^2$	<b>B</b>	$175 m^2$
	<b>C</b>	$180 m^2$	<b>D</b>	$190 m^2$
<b>Q.33</b>	One of the diagonals of a rhombus is 6 cm. If its area is $48 cm^2$ , then the length of the other diagonal is			
	<b>A</b>	4 cm	<b>B</b>	5 cm
	<b>C</b>	16 cm	<b>D</b>	8 cm

Q.34	How many small cubes with edge of 3 m can be cut from a cuboid measuring $18m \times 12m \times 9m$ ?							
	A	70	B	75	C	76	D	72
Q.35	The total surface area of a cube is $486cm^2$ . The side of the cube is							
	A	6 cm	B	8 cm	C	9 cm	D	7 cm
Q.36	The volume of a cylinder is $90 cm^3$ and its base area is $18 cm^2$ . Find the height of the cylinder.							
	A	5 cm	B	72 cm	C	1800 cm	D	729 cm
Q.37	The area of a trapezium is $128cm^2$ . If the sum of the parallel sides is 32 cm, find the height of the trapezium.							
	A	4 cm	B	16 cm	C	8cm	D	12cm
Q.38	<p><b>CASE STUDY:</b></p> <p>To develop critical and analyzing skills amongst her students, a mathematics teacher showed her students a video of 3D objects and asked them to identify the 3D object. One such video was of MOVERS AND FIXERS using boxes (cube, cuboid).</p> <p>The edge of the box which is in the shape of cube is 11cm.</p> <p>The box which is cuboidal in shape has length 60cm, breadth 40cm and height 50 cm.</p> <p>i) What is the total surface area of the cube?</p>							
	A	$726cm^2$	B	$486cm^2$	C	$243cm^2$	D	$81cm^2$
	ii) What will be the cost of painting the cube at the rate of ₹5 per $cm^2$ ?							
	A	₹2430	B	₹1215	C	₹3630	D	₹405
	iii) Find volume of the cube?							
	A	$625 cm^3$	B	$1331 cm^3$	C	$331 cm^3$	D	$1728 cm^3$
	iv) What will be the area of the cardboard needed to make the cuboidal box?							
	A	$1400 cm^2$	B	$1480 cm^2$	C	$800 cm^2$	D	$14800 cm^2$
	v) What will be the cost of making the cuboidal box at the rate of ₹5 per $cm^2$ ?							
	A	₹74000	B	₹7000	C	₹7400	D	₹4000
Q.39	A car covers a distance of 135 km with 10 litres of petrol. The amount of petrol needed to cover a distance of 216 km is							
	A	15 litres	B	16 litres	C	18 litres	D	12 litres
Q.40	If 20 persons can do a piece of work in 7 days, then the number of persons required to complete the work in 28 days is							
	A	5	B	80	C	9	D	120

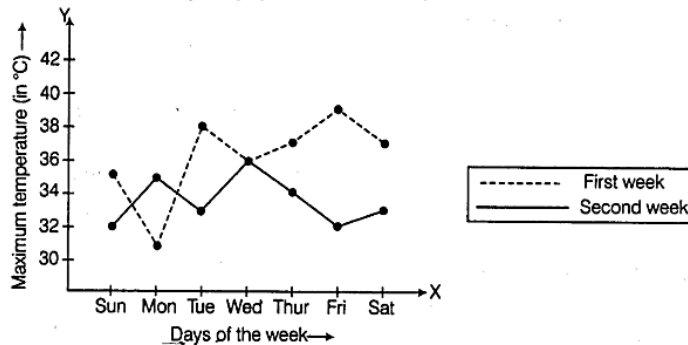
<b>Q.41</b>	A car is moving at a uniform speed of 75 km/hour. How far will it travel in 20 minutes?							
	<b>A</b>	20 km	<b>B</b>	25km	<b>C</b>	30km	<b>D</b>	22km
<b>Q.42</b>	There are 100 students in a hostel. Food provisions for them is for 20 days. How long will these provisions last, if 25 more students join the group?							
	<b>A</b>	20 days	<b>B</b>	24 days	<b>C</b>	28 days	<b>D</b>	16 days
<b>Q.43</b>	In the following table x varies inversely as y. Find the constant of variation.							
	x	1	2	3	5	9		
	y	90	45	30	18	10		
	<b>A</b>	90	<b>B</b>	10	<b>C</b>	6	<b>D</b>	15
<b>Q.44</b>	If d varies directly as t, and if d = 4, when t = 9, find d when t = 27							
	<b>A</b>	36	<b>B</b>	3	<b>C</b>	12	<b>D</b>	7
<b>Q.45</b>	Find the area of a rectangle whose length is $4a^2b$ and breadth is $-6a^3b^2c$							
	<b>A</b>	$24a^5b^3c$	<b>B</b>	$-24a^5b^3c$	<b>C</b>	$-24a^6b^2c$	<b>D</b>	$24a^6b^3c$
<b>Q.46</b>	Find the volume of a cuboid whose length is xy, breadth is 2yz and height is 3zx							
	<b>A</b>	$6x^2y^2z^2$	<b>B</b>	$5xy^2z^2$	<b>C</b>	$6x^2yz^2$	<b>D</b>	$5x^2y^2z^2$
<b>Q.47</b>	Which of the following is the trinomial?							
	<b>A</b>	$21x^2$	<b>B</b>	xyz	<b>C</b>	$x^2 + xy + y^2$	<b>D</b>	$4x + 3$
<b>Q.48</b>	Find the value of the expression $a^2 + ab + 7$ when a = 2, b = 0							
	<b>A</b>	13	<b>B</b>	9	<b>C</b>	7	<b>D</b>	11
<b>Q.49</b>	$53^2 - 47^2$ is equal to							
	<b>A</b>	600	<b>B</b>	60	<b>C</b>	6	<b>D</b>	6000
<b>Q.50</b>	$(x + 3y)^2$ is equal to							
	<b>A</b>	$x^2 + 3xy + 9y^2$	<b>B</b>	$x^2 + 6xy + 9y^2$	<b>C</b>	$x^2 - 6xy + 9y^2$	<b>D</b>	$x^2 - 3xy + 9y^2$
<b>Q.51</b>	$(5x - 3b)(5x + 3b)$ is equal							
	<b>A</b>	$25x^2 - 15bx + 9b^2$	<b>B</b>	$25x^2 + 30bx + 9b^2$	<b>C</b>	$5x^2 - 9b^2$	<b>D</b>	$25x^2 - 9b^2$
<b>Q.52</b>	Evaluate $103^2$ using identities:							
	<b>A</b>	10906	<b>B</b>	10690	<b>C</b>	10609	<b>D</b>	10096
<b>Q.53</b>	Using Identities evaluate $72 \times 68$							
	<b>A</b>	4698	<b>B</b>	4986	<b>C</b>	4896	<b>D</b>	4968

<b>Q.54</b>	Which of the following are like terms?							
	<b>A</b>	$5xyz^2, -3xy^2z$	<b>B</b>	$-5xyz^2, 7xyz^2$	<b>C</b>	$5xyz^2, 5x^2yz$	<b>D</b>	$5xyz^3, x^2y^2z^2$
<b>Q.55</b>	Common factor of $7abc, 14ab^2, 21a^2b$ is							
	<b>A</b>	$7ab$	<b>B</b>	$7abc$	<b>C</b>	$7ac$	<b>D</b>	$7a^2b^2c$
<b>Q.56</b>	The factorization of $6x - 42$ is							
	<b>A</b>	$6(x - 7)$	<b>B</b>	$3(x - 7)$	<b>C</b>	$2(x - 7)$	<b>D</b>	$6(x + 7)$
<b>Q.57</b>	The factorization of $49p^2 - 36$ is							
	<b>A</b>	$(7p + 6)(7p - 6)$	<b>B</b>	$(6p + 7)(6p - 7)$	<b>C</b>	$(7p + 6)^2$	<b>D</b>	$(7p - 6)^2$
<b>Q.58</b>	$x^2 + 5x + 6$ can be factorized and written as							
	<b>A</b>	$(x + 3)(x - 2)$	<b>B</b>	$(x - 3)(x - 2)$	<b>C</b>	$(x - 3)(x + 2)$	<b>D</b>	$(x + 3)(x + 2)$
<b>Q.59</b>	The factorized form of $2a(1 - 4b) - 1(1 - 4b)$							
	<b>A</b>	$(1 - 4b) + (2a - 1)$	<b>B</b>	$(1 - 4b)(2a - 1)$	<b>C</b>	$(1 - 4b)(2a + 1)$	<b>D</b>	$(1 + 4b)(2a + 1)$
<b>Q.60</b>	The factorized form of $3xy + 3y + 5x + 5$ is							
	<b>A</b>	$(x - 1)(3y + 5)$	<b>B</b>	$(x + 1)(3y - 5)$	<b>C</b>	$(x + 1)(3y + 5)$	<b>D</b>	$(x - 1)(3y - 5)$
<b>Q.61</b>	The factorized form of $36x^2 + 60x + 25$ is							
	<b>A</b>	$(6x - 1)(6x - 5)$	<b>B</b>	$(5x + 15)(6x + 20)$	<b>C</b>	$(6x + 12)(6x + 13)$	<b>D</b>	$(6x + 5)(6x + 5)$
<b>Q.62</b>	A graph that displays data that changes continuously over periods of time is							
	<b>A</b>	Bar graph	<b>B</b>	Pie chart	<b>C</b>	Histogram	<b>D</b>	Line graph
<b>Q.63</b>	Which among the following lie on the y axis?							
	<b>A</b>	(3,3)	<b>B</b>	(2,0)	<b>C</b>	(0,2)	<b>D</b>	(2,3)
<b>Q.64</b>	Which among the following lie on the x axis?							
	<b>A</b>	(5,3)	<b>B</b>	(3,0)	<b>C</b>	(3,5)	<b>D</b>	(5,5)
<b>Q.65</b>	(0,0) are the coordinates of							
	<b>A</b>	Point on the x-axis	<b>B</b>	Origin	<b>C</b>	Point on the y-axis	<b>D</b>	None of these

Q.66

**CASE STUDY**

The graph shows the maximum temperatures recorded for two consecutive weeks of a town. Study the graph and answer the questions that follow.



i) On which day was the temperature same in both the weeks?

- |   |           |   |          |   |          |   |         |
|---|-----------|---|----------|---|----------|---|---------|
| A | Wednesday | B | Saturday | C | Thursday | D | Tuesday |
|---|-----------|---|----------|---|----------|---|---------|

ii) On which day was the temperature 35°C for the first week?

- |   |         |   |           |   |          |   |        |
|---|---------|---|-----------|---|----------|---|--------|
| A | Tuesday | B | Wednesday | C | Thursday | D | Sunday |
|---|---------|---|-----------|---|----------|---|--------|

iii) On which day was the difference in temperatures the maximum for both the weeks?

- |   |        |   |         |   |        |   |          |
|---|--------|---|---------|---|--------|---|----------|
| A | Monday | B | Tuesday | C | Friday | D | Saturday |
|---|--------|---|---------|---|--------|---|----------|

iv) On which day was the temperature highest for the second week?

- |   |           |   |          |   |        |   |        |
|---|-----------|---|----------|---|--------|---|--------|
| A | Wednesday | B | Thursday | C | Friday | D | Sunday |
|---|-----------|---|----------|---|--------|---|--------|

Q67 If the cost of 24 oranges is ₹72, then find the cost of 120 oranges.

- |   |      |   |      |   |      |   |      |
|---|------|---|------|---|------|---|------|
| A | ₹180 | B | ₹360 | C | ₹172 | D | ₹500 |
|---|------|---|------|---|------|---|------|

**Fill in the blanks(1mark)**

- Q68
- i) The cube of 100 will have \_\_\_\_\_ number of zeroes.
  - ii) The ones digit of the cube of 73 is \_\_\_\_\_.
  - iii) The product of a rational number and its multiplicative inverse is \_\_\_\_\_

Q69 The height to which a balloon with hydrogen gas rises in the air varies directly as time. Given below are some observations about the time and the corresponding height of the balloon (in metres). Find the missing terms in the table.

Time (minutes)	3	4	B	25
Height (in metres)	A	48	84	C

- A = \_\_\_\_\_  
 B = \_\_\_\_\_  
 C = \_\_\_\_\_

## Answers

<b>Answers</b>	1	D	2	A	3	C	4	B
	5	A	6	A	7	C	8	D
	9	D	10	C	11	B	12	A
	13	D	14	B	15	C	16	B
	17	B	18	D	19	A	20	B
	21	A	22	B	23	C	24	C
	25	C	26	B	27	D	28	A
	29	B	30	B	31	D	32	B
	33	C	34	D	35	C	36	A
	37	C	38	I)A, II)C, III)B, IV)D, V)A	39	B	40	A
	41	B	42	D	43	A	44	C
	45	B	46	A	47	C	48	D
	49	A	50	B	51	D	52	C
	53	C	54	B	55	A	56	A
	57	A	58	D	59	B	60	C
	61	D	62	D	63	C	64	B
	65	B	66	I)A, II)D, III)C, IV)A	67	B	68	I)6, II)7, III)1
	69	A=36, B=7, C=300						

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