

INDIAN SCHOOL AL WADI AL KABIR

Post Mid-Term Revision Worksheet (2025-26)

Class: VIII Sub: MATHEMATICS Max Marks: 30

Instructions:

Section A: Multiple Choice Questions (Q.1 to Q.8) Section B: Source based questions (Q.9 to Q.12) Section C: Long Answer Questions (Q.13 to Q.16)

Section D: 4 Marks Question & Case study Question (Q.17 to Q.18).

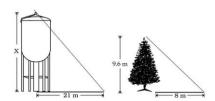
NOTE: This practice paper consists of 3 printed pages.

| Section A: Multiple Choice Question (Q.1 to Q.8) of 1 mark each | | | | | | | | |
|---|---|---------------------------------|---|---------------------------------|---|--------------------------------|---|--------------------------------|
| 1. | 72 books are packed in 4 cartons of the same size. How many cartons are required for 360 books? | | | | | | | |
| | A | 20 | В | 18 | С | 22 | D | 25 |
| 2. | If the base area of a cuboid is 268 m^2 and height is 4.5m then its volume is | | | | | | | |
| | A | 7156 <i>m</i> ³ | В | 1206 <i>m</i> ³ | С | $1156m^3$ | D | $1006m^3$ |
| 3. | Unit place digit of cube root of 19638 | | | | | | | |
| | A | 3 | В | 9 | С | 7 | D | 2 |
| 4. | The ratio of the lengths of the parallel sides of a trapezium is 5:3. The distance between them is 16 cm. If the area of the trapezium is 960 sq cm, the lengths of the parallel sides are: | | | | | | | |
| | A | 5cm, 3cm | В | 75cm, 45cm | С | 45cm, 16cm | D | 15cm, 75cm |
| 5. | A gift box is shaped like a cube. The company prints the design on all six faces. If the total surface area of the box is 486 cm^2 , find the edge of the cube and the volume of the box. | | | | | | | |
| | A | 9 cm, 81 <i>cm</i> ³ | В | 81cm, 27 <i>cm</i> ³ | С | 9cm, 72 <i>cm</i> ³ | D | 9cm,729 <i>cm</i> ³ |
| 6. | The diagonal of a quadrilateral shape field is 30m and the perpendiculars dropped on it from the remaining opposite vertices are 9 m and 10 m, then the area of the field is | | | | | | | |
| | A | 285m ² | В | 192 <i>m</i> ² | С | 152 <i>m</i> ² | D | 232 <i>m</i> ² |
| 7. | A car covers 400 km at a constant speed in 5 hours. How much time will it take to cover 720 km at the same speed? | | | | | | | |
| | A | 7 hours | В | 8 hours | С | 9 hours | D | 10 hours |

| The smallest number by which 5184 to be divided to get a perfect cube is | | | | | | | | |
|--|--|--|---|---|---|---|--|--|
| Α | 3 | В | 6 | С | 8 | D | 12 | |
| Section B: Source based questions (Q.9 to Q.12) of 1 mark each | | | | | | | | |
| Mohan has to prepare a physics project in the form of a cubical box, but he only has a cuboidal box with dimensions 5 cm, 3 cm, and 5 cm. He needs to combine multiple such cuboids to form a perfect cube. | | | | | | | | |
| What | is the volume of | the cubo | idal box? | | | | | |
| Α | 13 <i>cm</i> ³ | В | 25 <i>cm</i> ³ | С | 45 <i>cm</i> ³ | D | 75 <i>cm</i> ³ | |
| How | How many cuboids are needed to form a perfect cube? | | | | | | | |
| A | 75 | В | 45 | С | 25 | D | 15 | |
| If the | volume of a cube | e is 3375 | cm ³ , what will be the | lengt | h of the edge? | | | |
| A | 15 | В | 25 | С | 45 | D | 75 | |
| Evaluate $\sqrt[3]{\frac{10648}{2197}}$ | | | | | | | | |
| A | $\frac{11}{13}$ | В | $\frac{22}{2197}$ | С | $\frac{22}{13}$ | D | $\frac{8}{2197}$ | |
| Section C: Long Answer Questions (Q13 to Q.16) | | | | | | | | |
| On a birthday party, 5 bottles of coke are served for a group of 6 children. How many friends were present at the birthday party, if 15 bottles of coke were used? (2m) | | | | | | | | |
| How many cubes of side 16 cm can be fitted into a box which measures 3.2 m x 80 cm x 64 cm? (2m) | | | | | | | | |
| Find the cube root of 74088 by the method of prime factorization. (3m) | | | | | | | | |
| A lawn mower takes 600 complete revolutions to move the lawn. Find the area of the lawn in sq. m, if the diameter of the lawn mower is 42 cm and length is 1.5m. (3m) | | | | | | | | |
| Section D: Long Answer Question of 4 marks &Case study (Q.17 & Q.18) | | | | | | | | |
| Vineet is painting the walls and the ceiling of a cuboidal room with length, breadth and height 28m, 15m and 7m respectively. Using each can of paint, $146m^2$ of area can be painted. How many cans of paint will he need to paint the room? | | | | | | | | |
| | Moha box wa a perf What A How re A Evaluate A Were How re (2m) Find to A law sq. m | Section Mohan has to prepare a box with dimensions 5 a perfect cube. What is the volume of a perfect cube. What is the volume of a cube \mathbf{A} and $$ | Section B: Sou Mohan has to prepare a physics box with dimensions 5 cm, 3 cm a perfect cube. What is the volume of the cubo A $13cm^3$ B How many cuboids are needed A 75 B If the volume of a cube is 3375 A 15 B Evaluate $\sqrt[3]{\frac{10648}{2197}}$ A $\frac{11}{13}$ B Section C: Long A Section C: Long A Find the cube root of 74088 by A lawn mower takes 600 complisq. m, if the diameter of the law Section D: Long Vineet is painting the walls and $28m$, $15m$ and $7m$ respectively. | Section B: Source based questions (Complete Received Property of A section B). Source based questions (Complete Received Property of A source Property of A | Section B: Source based questions (Q.9 to Mohan has to prepare a physics project in the form of a cubox with dimensions 5 cm, 3 cm, and 5 cm. He needs to compete a perfect cube. What is the volume of the cuboidal box? A $13cm^3$ B $25cm^3$ C How many cuboids are needed to form a perfect cube? A 75 B 45 C The volume of a cube is $3375cm^3$, what will be the length $3\sqrt{\frac{10648}{2197}}$ A 15 B 25 C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Questions (Q13 to C) C Section C: Long Answer Question of A lawn mower takes 600 complete revolutions to move the sq. m, if the diameter of the lawn mower is 42 cm and ler Section D: Long Answer Question of 4 mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long Answer Question of A mark Vineet is painting the walls and the ceiling of a cuboidal rocation C Section D: Long A | Section B: Source based questions (Q.9 to Q.12) of 1 mark et Mohan has to prepare a physics project in the form of a cubical box, but he obx with dimensions 5 cm, 3 cm, and 5 cm. He needs to combine multiple su a perfect cube. What is the volume of the cuboidal box? A 13cm³ B 25cm³ C 45cm² How many cuboids are needed to form a perfect cube? A 75 B 45 C 25 If the volume of a cube is $3375cm³$, what will be the length of the edge? A 15 B 25 C 45 Evaluate $\sqrt[3]{\frac{10648}{2197}}$ Section C: Long Answer Questions (Q13 to Q.16) On a birthday party, 5 bottles of coke are served for a group of 6 children. were present at the birthday party, if 15 bottles of coke were used? (2) How many cubes of side 16 cm can be fitted into a box which measures 3.2 n (2m) Find the cube root of 74088 by the method of prime factorization. A lawn mower takes 600 complete revolutions to move the lawn. Find the are sq. m, if the diameter of the lawn mower is 42 cm and length is 1.5m. Section D: Long Answer Question of 4 marks &Case study (Q. Vineet is painting the walls and the ceiling of a cuboidal room with length, brown 15 marks 16 marks 25 m, 15 m and 7m respectively. Using each can of paint, 146m² of area can be 28m, 15m and 7m respectively. Using each can of paint, 146m² of area can be 20 m. | Section B: Source based questions (Q.9 to Q.12) of 1 mark each Mohan has to prepare a physics project in the form of a cubical box, but he only hox with dimensions 5 cm, 3 cm, and 5 cm. He needs to combine multiple such coaperfect cube. What is the volume of the cuboidal box? A 13cm³ B 25cm³ C 45cm³ D How many cuboids are needed to form a perfect cube? A 75 B 45 C 25 D If the volume of a cube is $3375cm^3$, what will be the length of the edge? A 15 B 25 C 45 D Evaluate $\sqrt[3]{10648}$ $\sqrt[3]{2197}$ A $\sqrt[3]{11}$ B $\sqrt[3]{2197}$ C $\sqrt[3]{2}$ C $\sqrt[3]{13}$ D Section C: Long Answer Questions (Q13 to Q.16) On a birthday party, 5 bottles of coke are served for a group of 6 children. How were present at the birthday party, if 15 bottles of coke were used? (2m) How many cubes of side 16 cm can be fitted into a box which measures 3.2 m x 8 (2m) Find the cube root of 74088 by the method of prime factorization. (3 A lawn mower takes 600 complete revolutions to move the lawn. Find the area of sq. m, if the diameter of the lawn mower is 42 cm and length is 1.5m. (3) Section D: Long Answer Question of 4 marks &Case study (Q.17 & Vineet is painting the walls and the ceiling of a cuboidal room with length, breadtile 28m, 15m and 7m respectively. Using each can of paint, 146 m^2 of area can be painting the walls and the ceiling of a cuboidal room with length, breadtile 28m, 15m and 7m respectively. Using each can of paint, 146 m^2 of area can be painting the walls and the ceiling of a cuboidal room with length, breadtile 28m, 15m and 7m respectively. Using each can of paint, 146 m^2 of area can be painting the walls and the ceiling of a cuboidal room with length, breadtile 28m, 15m and 7m respectively. Using each can of paint, 146 m^2 of area can be painting the walls and the ceiling of a cuboidal room with length, breadtile 28m, 15m and 7m respectively. Using each can of paint, 146 m^2 of area can be painting the walls and the ceiling of a cuboidal room with length, breadtile 28m, 15m and 7m respectively. | |

Case Study:

One day Mathematics teacher explained about Direct and Inverse proportion with the help of many examples. The teacher gave example of relation between the length of shadow and height of the water tank and height. A water tank casts a shadow 21m long. A tree of height 9.6m casts a shadow 8m long at the same time.



Answer the following questions based on the information given:

- a) Find the height of the water tank in the above situation.
- b) A water tank casts a shadow 27 m long. A tree of height 10.5 m casts a shadow 9 m long at the same time. The lengths of the shadows are directly proportional to their heights. Find the height of the tank.
- c) Find the constant of proportionality if x and y vary directly:

| Х | 5 | 2 | | |
|---|-----|----|--|--|
| У | 210 | 84 | | |

| | Answers | | | | | | | | | |
|-----|--------------|-----|---|-----|----------|-----|----------|-----|-------------------|--|
| 1. | А | 2. | В | 3. | D | 4. | В | 5. | D | |
| 6. | А | 7. | С | 8. | Α | 9. | D | 10. | В | |
| 11. | А | 12. | С | 13. | 18 | 14. | 400 | 15. | 42 | |
| 16. | 1188 sq.m | 17. | 7 | 18. | a) 25.2m | 18. | b) 31.5m | 18. | c) $\frac{1}{42}$ | |