

O. P. JINDAL SCHOOL, RAIGARH (CG) 496 001

Phone : 07762-227042, 227293, (Extn. 227001 - 49801, 02, 04, 06); Fax : 07762-262613; e-mail: opjsraigarh@jspl.com; website : www.opjsrgh.in

Class : VI - Mathematics

1. Complete the following conversions –
 - a) 1 km =cm
 - b) 8 km =mm
 - c) 92 km =m
 - d) 6 kg =mg
 - e) 45 l =ml
2. 177144 books are made into bundles, each containing 122 books. How many bundles are made ?
3. What is the least 6-digit number that is exactly divisible by 43 ?
4. Insert < or > sign in the box –
 - a) -6 -8
 - b) -2 -1
 - c) -10 5
 - d) -65 -165
5. The sum of seven consecutive integers is equal to 7. Write the greatest and the least integer.
6. In a Maths quiz one mark is given for every correct answer and one mark is deducted for every wrong answer. There are 20 questions. If all questions are answered correctly a student's score will be 20; if all questions are answered incorrectly a student's score will be -20. Part way through this quiz Ramesh has a score of 2. What will be his new score if-
 - a) Answers the next 5 questions correctly
 - b) Answers the next 5 questions incorrectly
 - c) Answers 2 of the next 5 questions correctly and 3 of them incorrectly ?
 - d) Answers 4 of the next 5 questions correctly and 1 of them incorrectly ?
7. Draw a number line and answer the following questions-
 - a) Which number will we reach if we move three numbers to the left of -5?
 - b) Which number will we reach if we move six numbers to the right of -2?
 - c) If we are at -4, in which direction should we move to reach 4?
 - d) If we are at 2, in which direction should we move to reach -5?
8. In Sahara desert one day it was 136°F . In the Gobi Desert, a temperature of -50°F was recorded. What is the difference between these two temperatures ?
9. Simplify-
 - a) $(-6) + (-15) + 10 + (-16)$
 - b) $38 + (-65) + 29 + 45$
 - c) $150 + (-95) + 63 + (-45)$
 - d) $1059 + (-89) + 19 + (-29)$
10. If + means \div , - means \times , \times means $-$ and \div means \times , then what is the value of $6 - 4 \text{ of } 7 + [20 + \{5 - (\overline{3 - 2})\}]$?
11. Simplify
 - a) $20 + \{12 - 5 + (8 - 3)\}$
 - b) $90 \times [143 - \{6 \text{ of } 7 + (110 - 3 \times 8)\}]$
 - c) $120 - [132 \div (3 \text{ of } 4) - \{20 - \overline{15 - 3}\}]$
 - d) $100 - [18 - \{16 \div 2 - (16 - 12 \div 3) \div 3\}]$

12. Express each of the following numbers –
- As a sum of two prime numbers –(i) 56 (ii) 80 (iii) 96
 - As a sum of three odd prime numbers –(i) 39 (ii) 71 (iii) 51
 - As a sum of twin primes –(i) 24 (ii) 60 (iii) 84
13. Using the divisibility test rules, check the divisibility of the following numbers by 2,3,4,5,6,8,9,10 and 11 –
- 672512 (b) 619680
14. In each of the following, fill in the blanks with the smallest digit to make it divisible –
- By 3 – (i) 176....26 (ii) 206....38
 - By 4 – (i) 3949....4 (ii) 2892....6
 - By 8 – (i) 77099.... (ii) 377....52
 - By 9 –(i) 6.....1076 (ii) 410....33
 - By 11 – (i) 101....313 (ii) 215....173
15. Determine if 241032 is divisible by 66 or not?
16. Find the difference between the smallest three digit number and smallest natural number. Also, carry out prime factorisation of the resulting number.
17. Find the greatest number which divides 1764, 4053, 3639 and 7624 leaving remainders 4, 5, 7 and 8 respectively.
18. A rectangular floor is 2016 cm long and 1560 cm broad. It is to be paved with square tiles of the same size. Find the least possible number of such tiles.
19. Find the HCF and LCM of 231 and 273. Also, find the product of the HCF and LCM of the numbers. Check, how the above product is related to the product 231×273 .
20. Draw a rough sketch of each of the following. Also, find the number of lines of symmetry each have –
- A scalene triangle
 - an equilateral triangle
 - an isosceles triangle
 - a rectangle
 - a square
 - a parallelogram
 - a trapezium
 - a rhombus
 - a regular hexagon
 - a circle
 - a kite
 - a isosceles trapezium
21. In the adjoining polygon name the following:
- Vertices
 - Pair of adjacent vertices
 - Sides
 - Pair of adjacent sides
 - Diagonals
22. Draw a quadrilateral ABCD and write the following –
- Vertices
 - Angles
 - Pairs of adjacent angles
 - Pairs of adjacent sides
 - Pairs of opposite angles
 - Pairs of opposite sides
 - Diagonals
23. Draw a circle of any radius and mark each of the following in them –
- Its centre
 - A radius
 - A diameter
 - A point in its interior
 - A point in its exterior

- f) A point on the circle
- g) A chord
- h) An arc
- i) A sector
- j) A segment

24. Write the differences between a line and a line segment.

25. A boatman is rowing his boat due north east. In which direction will he be rowing if he turns to the left through –

- a) One straight angle ?
- b) One complete angle?
- c) One right angle?
- d) Three right angles?

26. State the kind of angle that is formed between the following directions. Measure the angles in anti-clockwise directions –

- a) East and north
- b) South and north east
- c) West and north west
- d) South west and north east

27. From the data given, identify the type of triangles –

- a) Sides : 4.5 cm, 5.5 cm, 6.5 cm
- b) Sides : 6.2 cm, 4.7 cm, 6.2 cm
- c) Angles : 45° , 75° , 60°
- d) Angles : 40° , 30° , 110°
- e) Angles : 30° , 60° , 90°
- f) Angles 90° , 45° , 45°
- g) Sides : 6 cm, 6 cm, 6 cm

28. Say True or False –

- a) The opposite sides of a parallelogram are parallel.
- b) Every rectangle is a parallelogram.
- c) Every parallelogram is a rectangle.
- d) Every square is a rectangle.
- e) Every square is a rhombus.
- f) Every rhombus is a square.
- g) The opposite sides of a rectangle are equal and parallel.
- h) All the angles of a rectangle are equal.
- i) Both the diagonals of a rhombus are equal in length.
- j) Diagonals of a rhombus bisect each other.
- k) Every rhombus is a parallelogram.
- l) Every parallelogram is a rhombus.
- m) The diagonals of a parallelogram are equal.
- n) The diagonals of a square are perpendicular to each other.

29. Write the number of faces, edges and vertices of the given solid shapes –

- a) Cuboid b) cube c) cylinder d) tetrahedron e) square pyramid f) triangular prism
- g) square prism h) cone i) hexagonal prism j) pentagonal pyramid

30. Name the quadrilaterals which has –

- a) Equal diagonals
- b) Diagonals perpendicular to each other
- c) two pairs of opposite sides equal and parallel
- d) Exactly one pair of opposite sides parallel
- e) All sides equal
- f) Diagonals bisect each other.
- g) Each vertex angle as a right angle
- h) two pairs of consecutive sides equal.

.....X.....

