# INDIAN SCHOOL SOHAR SUMMATIVE ASSESSMENT - 1 <br> MATHEMATICS 

CLASS: VIII
TIME: 2 HRS
DATE: 21-09-2014
MARKS: 60
General Instructions:

- All questions are compulsory.
- Section A comprises 6 questions of 1 mark each.
- Section B comprises 6 questions of 2 marks each.
- Section C comprises 6 questions of 3 marks each.
- Section D comprises 6 questions of 4 marks.


## SECTION A

1. Write a Pythagorean triplet whose one member is 12 .
(a) $(12,38,10)$
(b) $(12,35,37)$
(c) $(6,35,37)$
(d) $(7,48,50)$
2. $\qquad$ is the multiplicative inverse of $-\frac{7}{9} \times 3 \times \frac{4}{21}$.
(a) $-\frac{4}{9}$
(b) $-\frac{9}{4}$
(c) $\frac{9}{4}$
(d) $\frac{4}{9}$
3. What is the additive inverse of $\frac{-1}{-7}$ ?
(a) $\frac{1}{7}$
(b) $\frac{27}{11}$
(c) $\frac{-27}{11}$
(d) $\frac{-1}{7}$
4. How many sides does a regular polygon have if the measure of an exterior angle is $24^{0}$ ?
(a) 16
(b) 17
(c) 15
(d) 18
5. How many natural numbers lie between $190^{2}$ and $191^{2}$ ?
(a) 190
(b) 191
(c) 380
(d) 382
6. Find the length of the side of a square whose area is $441 \mathrm{~m}^{2}$.
(a) 23 m
(b) 21 m
(c) 17 m
(d) 13 m

## SECTION B

7. Construct a rectangle with adjacent sides of lengths 5 cm and 4 cm .
8. Simplify and solve; $3(5 z-7)-2(9 z-11)=4(8 z-13)-17$.
9. Find any 8 rational numbers between $-\frac{2}{5}$ and $\frac{1}{4}$
10. From a well shuffled deck of 52 playing cards, what is the probability of getting
(i) a spade card
(ii) a red queen card
11. Represent $-\frac{5}{7}, \frac{4}{7}, \frac{5}{7}, 1$ on the same number line.
12. Two diagonals of a rectangle are $(3 x+2) \mathrm{cm}$ and $(2 x+3) \mathrm{cm}$. Find the measurement of each diagonal.

## SECTION C

13. Construct a rhombus whose diagonals are 5.2 cm and 6.4 cm long.
14. The base of an isosceles triangle is $\frac{4}{3} \mathrm{~cm}$. The perimeter of the triangle is $4 \frac{2}{15} \mathrm{~cm}$. What is the length of either of the remaining equal sides ?
15. Find the smallest square number that is divisible by each of the numbers $8,15,20$.
16. Find the smallest number should 1188 be divided so that the quotient is a perfect cube.
17. How many sides does a regular polygon have if each of its interior angles is $144^{0}$ ?
18. Find the cube root of 110592 .

## SECTION D

19. Construct a quadrilateral OKAY where $\mathrm{OK}=4 \mathrm{~cm}, \mathrm{KA}=6.5 \mathrm{~cm}, \angle \mathrm{O}=90^{\circ}, \angle \mathrm{Y}=85^{\circ}$, and $\angle \mathrm{A}=110^{\circ}$.
20. Half of a herd of deer are grazing in the field and three fourths of the remaining are playing nearby. The rest 9 are drinking water from the pond. Find the number of deer in the herd.
21. Find the square root of:
(i) 974169
(ii) 51.84
22. The diagonals of a rhombus are 12 cm and 16 cm . Find the length of one side of the rhombus.
23. Construct a pie chart for the following:-

On a particular day, the sales (in rupees) of different items of a baker's shop are given below.

| Items | Ordinary <br> bread | Fruit <br> bread | Cakes | Biscuits | Others | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| sales | 320 | 80 | 160 | 120 | 40 | 720 |

24. Draw a histogram to represent the following data:

Monthly salary (in Rs)
Number of teachers

| $5600-5700$ | 8 |
| :--- | :--- |
| $5700-5800$ | 4 |
| $5800-5900$ | 3 |
| $5900-6000$ | 5 |
| $6000-6100$ | 2 |
| $6100-6200$ | 3 |

