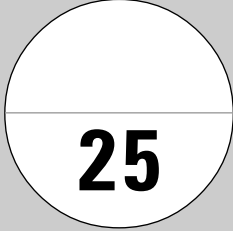


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| C - 16 | FORMATIVE ASSESSMENT - I | Class - 7 :: Star Mathematics |  |
| Vikram Star Mathematics | | | |
| Syllabus : (1 & 2 Units) Page No. 5 - 31 | Time : 1 Hour | Max.Marks: 25 | |
| Name : | Class : | Section : | Roll No. |

I. Find the products. [3 x 2 = 6]

1) $64 \times (-7)$

2) $3 \times (-4) \times (-6)$

3) $0 \times (-3) \times (-361)$

II. Verify that $a \div b \neq b \div a$ for the following value of a and b . [3 M]

1) $a = -72; b = -6$

III. Simplify the following. [2 x 2 = 4]

1) $27 - [5 + \{28 - (29 - 7)\}]$

2) $\{60 \times (-3)\} \div 45 \div (-3)$

IV. Find the product. [2 x 2 = 4]

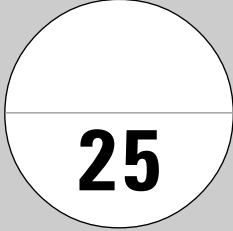
1) $\frac{5}{6} \times \frac{16}{25} \times \frac{35}{45}$

2) $3\frac{3}{5} \times 2\frac{2}{9}$

V. Solve the following. [2 x 4 = 8]

1) In a ship which is boarded by 5000 passengers, $\frac{3}{5}$ are in executive class, $\frac{1}{5}$ in business class, $\frac{1}{8}$ in a general class and rest of passengers in the economy class. Find the number of passengers travelling in each class.

2) A truck driver earns $3\frac{2}{7}$ times of what his helper earns. If the helper earns ₹1820, how much does the driver earn ?

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| C - 16 | FORMATIVE ASSESSMENT - II | Class - 7 :: Star Mathematics |  |
| Vikram Star Mathematics | | | |
| Syllabus : (3,4 & 5 Units) Page No. 32 - 74 | Time : 1 Hour | Max.Marks: 25 | |
| Name : | Class : | Section : | Roll No. |

I. 1) Arrange the following rational numbers in descending order. [1M]

$$\frac{-1}{3}, \frac{5}{6}, \frac{-5}{6}, \frac{7}{9}, \frac{-11}{12}$$

2) Arrange the following rational numbers in ascending order. [1M]

$$\frac{2}{7}, \frac{-3}{5}, \frac{-4}{9}, \frac{8}{13}$$

II. Add the following Rational numbers. [2 x 2 = 4]

1) $\frac{19}{14}$ and $\frac{-23}{7}$

2) $-2 + \frac{3}{8} + \frac{-1}{5}$

III. Express the following rational numbers as decimal numbers. [3 x 2 = 6]

1) $\frac{-17}{2}$

2) $\frac{3842}{625}$

3) $\frac{8}{25}$

IV. Divide. [2 x 2 = 4]

1) $6.752 \div 5.275$

2) $0.76 \div 1000$

V. Express the following repeating decimals in the short form. [3 x 1 = 3]

1) 0.3333

2) 24.0826826826

3) 0.85714285714

VI. Solve these word problems. [2 x 3 = 6]

1) By what number should $\frac{-6}{11}$ be multiplied to $\frac{-64}{11}$?

2) A flask weighs 54.27 g when empty and 130.35 g when full of water. Find its weight when it is half full of water ?

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| Name : | Class : | Section : | Roll No. |
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I. Multiply the binomials

[2 x 2 = 4]

1) $(9y + 1)(5y - 1)$

2) $[2p + (-q)][2p - (-q)]$

II. Solve the following equations.

[2 x 2 = 4]

1) $2(x - 3) = x + 2$

2) $\frac{x}{3} - 5 = 7$

III. Identify the complementary and supplementary pairs of angles.

[2 x 2 = 4]

1) $5^\circ, 85^\circ$

2) $90^\circ, 90^\circ$

IV. Solve these word problems.

[2 x 4 = 8]

1) If $x - \frac{1}{x} = 5$, find the Value of

(1) $x^2 + \frac{1}{x^2}$ (2) $x^4 + \frac{1}{x^4}$

2) Bunty is 20 years old, and Monty is 4 years old. In how many years, Bunty will be twice as old as Monty ?

V. Multiple choice questions :

[5 x 1 = 5]

1) Which of the following is not a monomial ?

a) $5ab$

b) $7a^2b$

c) 40

d) $\frac{7}{ab}$

2) $9r^2 + 3s + 8$ is a

a) monomial

b) binomial

c) trinomial

d) none of these

3) How many days are there in b weeks and b days ?

a) $7b^2$

b) 7

c) $8b$

d) $14b$

4) Two angles are complementary, if their sum is

a) 60°

b) 90°

c) 180°

d) 360°

5) If two lines intersect, the vertically opposite angles are

a) complementary

b) supplementary

c) equal

d) unequal

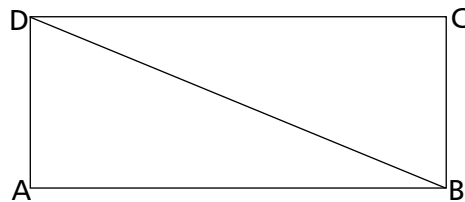
Name :

Class :

Section :

Roll No.

- I. The given figure ABCD is a rectangle. One of its diagonals divides it into two triangles. Is $\triangle ABD \cong \triangle CDB$? If yes, state the congruent parts. [1 x 3 = 3]



- II. Draw an equilateral triangle ABC of side 4cm. Construct the perpendicular bisector of each side. What do you notice ? What is your conclusion ? [1 x 3 = 3]
- III. Construct a $\triangle ABC$ such that $AB = 2.5$ cm, $BC = 6$ cm and $AC = 6.5$ cm. Measure $\angle B = ?$ Can you verify pythagoras theorem for this triangle ? [1 x 3 = 3]
- IV. Fill in the answers. [1 x 8 = 8]

| S.No | Shape | Order of Rotation | Angle of Rotation |
|------|----------------------|-------------------|-------------------|
| 1. | Square | | |
| 2. | Rectangle | | |
| 3. | Rhombus | | |
| 4. | Equilateral triangle | | |
| 5. | Regular hexagon | | |
| 6. | Regular pentagon | | |
| 7. | Regular octagon | | |
| 8. | Circle | | |

V. Multiple Choice Questions.

[8 x 1 = 8]

- 1) The symbol for congruency is
- a) \simeq b) \equiv c) $=$ d) \cong
- 2) Two circles are congruent if they have the same
- a) centre b) radius
c) centre and radius d) none of these
- 3) If two sides and one angle is given, a can be constructed.
- a) rhombus b) parallelogram c) triangle d) none of these
- 4) How many lines of symmetry a circle has ?
- a) 1 b) 2 c) 4 d) infinite
- 5) An equilateral triangle has lines of symmetry.
- a) 1 b) 2 c) 3 d) 4
- 6) How many axes of reflection symmetry does a square have ?
- a) 1 b) 2 c) 3 d) 4
- 7) What order of rotational symmetry does a square have ?
- a) 1 b) 2 c) 3 d) 4
- 8) Before constructing a triangle, check to see if the sum of the lengths of sides is greater than the length of the third side.
- a) one b) any two c) all the three d) none of these

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| C - 16 | <h1>SUMMATIVE ASSESSMENT - I</h1> | <h2>Class - 7 :: Star Mathematics</h2> | <div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"><h1 style="margin: 0;">50</h1></div> |
| Vikram Star Mathematics | | | |
| Syllabus : (1 - 7 Units) Page No. | Time : 2½ Hour | Max.Marks: 50 | |
| Name : | Class : | Section : | Roll No. |

I. State whether the following are true or false. [4 x 2 = 8]

- 1) $112 \div (-8) = 7$. _____
- 2) $0 \div 5$ is undefined. _____
- 3) $86 \div 0 = 0$. _____
- 4) Using the BDMAS rule, find the value of :
 $(30 + 120 - 84) \div [(-66) \div 6]$

II. Solve the following. [2 x 5 = 10]

- 1) Ankit can walk $7\frac{2}{3}$ km in an hour. How much distance will he cover in $3\frac{1}{5}$ hours ?
- 2) Product of two rational numbers is 15, if one of them is $-\frac{2}{3}$, find the other.

III. Multiply. [2 x 2 = 4]

- 1) 8.156×10
- 2) 156×0.001

Divide. [2 x 2 = 4]

- 3) $0.005 \div 100$
- 4) $34.34 \div 1000$

IV. Simplify the following and answer in the exponential form. [3 x 4 = 12]

- 1) $\left(\frac{|1|}{\text{Ⓢ}6}\right)^2 \div \frac{1}{6}$
- 2) $9^6 \div 9^8$
- 3) $\left(\frac{|-1|}{\text{Ⓢ}8}\right)^6 \div \left(\frac{|-1|}{\text{Ⓢ}8}\right)^6$

V. Solve the following. [2 x 6 = 12]

- 1) Find the value of x for which the following ratios are in proportion.
 $7 : 14 ::$ write the alphabet letter 'x' : 30
- 2) A total wages of 30 labourers were 3450 per day. What will be the total wages if 10 more labourers were added to them ?

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| C - 16 | SUMMATIVE ASSESSMENT - II | Class - 7 :: Star Mathematics | 50 |
| Vikram Star Mathematics Syllabus : (1 - 12 Units) Page No. | | | |
| Time : 2½ Hour | Max.Marks: 50 | | |
| Name : | Class : | Section : | Roll No. |

I. a) Find the following.

[2 x 3 = 6]

1) $\frac{1}{7}$ of 49

2) $\frac{1}{7}$ of $\frac{1}{9}$

b) Simplify :

[2 x 3 = 6]

3) $\frac{2}{3} \times \left(\frac{3}{4} - \frac{1}{8} \right) \div \frac{3}{4}$

4) $\frac{-36}{11} \times \frac{-99}{6}$

II. Convert

[2 x 3 = 6]

1) 450 m to km

2) 2 kg 5 mg to g

III. Solve the following.

[4 x 4 = 16]

1) Find 45% of 73 hours

Write the name of the shapes represented by the following shapes:

2) Door

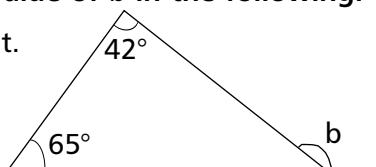
3) Tube light

4) Birthday cap

IV. Find the value of b in the following.

[2 x 3 = 6]

1) Find out.



2) In a triangle ABC, $\angle A = 120^\circ$ and $\angle B = 2 \angle C$. Find $\angle B$ and $\angle C$.

V. Solve these word problems.

[2 x 5 = 10]

1) The numerator of a fraction is 6 less than the denominator, If 3 is added to the numerator,

the fraction is equal to $\frac{2}{3}$. What is the original number ?

2) A milkman earned a profit of ₹ 75 after selling some litres of milk of ₹ 825. Find the cost of the milk.

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Vikram
Star Mathematics

SUMMATIVE ASSESSMENT - III

Syllabus :
(1 - 17 Units)

Class - 7 :: Star Mathematics

50

Page No.

Time : 2½ Hour

Max.Marks: 50

Name :

Class :

Section :

Roll No.

I. Solve the following :

[4 x 3 = 12]

Fill in the boxes.

1) $-216 \div (-12) = \square$

2) $(-2) \times (-2) \times \square = 8$

Divide

3) $17 \div \frac{1}{30}$

4) $3\frac{4}{5} \div 2\frac{1}{10}$

II. Solve the following.

[5 x 2 = 10]

Fill in the boxes.

1) $\frac{-2}{5} = \frac{\square}{15} = \frac{\square}{25}$

2) Express $\frac{13}{-7}$ as a rational number with numerator -65

3) Express the following as rational numbers.

$\overline{0.2958}$

4) Subtract : $\frac{-9}{15} - 0$

5) Find the number Whose 12% is 60

III. Solve the following.

[3 x 3 = 9]

1) Find the sum of $4x^2 + 3x - 4$ and $7x^2 - x + y$

2) Write the constant terms of the following algebraic expressions.

$2xy - 4z + 4$

3) Find the median for the following.

16, 7, 7, 15, 5

IV. Solve the word problems :

[3 x 3 = 9]

- 1) Pulkesh secures 630 marks out of 900 and Radha secures 650 marks out of 1000. Whose performance is better ?
- 2) The circular park has diameter 112 m. A 7 m road runs around the park. Find the area of the road.
- 3) Find the mean for the following.
74, 80, 92, 96, 70, 86

V. Multiple Choice Questions.

[10 x 1 = 10]

- 1) Area of a rectangle of length 4 cm and breadth 3 cm is
a) 10 cm^2 b) 12 cm^2 c) 14 cm^2 d) 16 cm^2
- 2) If the side of a square is doubled, its perimeter is
a) halved b) doubled c) remains same d) None of these
- 3) Collection of numbers gathered to give some information is called
a) frequency b) tally mark c) data d) mean
- 4) The median of the first ten natural numbers is
a) 5 b) 5.5 c) 6 d) 6.5
- 5) The top view of a horizontal cylinder will be a
a) circle b) rectangle c) square d) None of these
- 6) $0 \div (-3) = ?$
a) -3 b) 0 c) not defined d) 1
- 7) Which of the following is a mixed number ?
a) 1 b) $\frac{4}{3}$ c) $1\frac{3}{4}$ d) $1\frac{8}{3}$
- 8) Which of the following statements is not true ?
a) zero is natural number b) zero is a whole number
c) zero is an integer d) zero is a rational number
- 9) If $a = \frac{p}{q}$, then $\frac{1}{a} = ?$
a) $\frac{1}{pq}$ b) $\frac{p}{q}$ c) $\frac{q}{p}$ d) $\frac{1}{q}$
- 10) Which of the following is correctly matched ?
a) deci-one hundredth b) centi-one thousandth
c) milli-one thousandth d) milli-one hundredth
