

KENDRIYA VIDYALAYA SANGATHAN, HYDERABAD REGION
FORMATIVE ASSESSMENT – I, JULY – 2014

CLASS: VII

MAX MARKS: 40

SUB: MATHEMATICS

TIME: 90 MINUTES

SECTION – A

Multiple choice questions.

1M X 5 = 5M

1: The sum $-10 + 3 =$

A: 7 B: -10 C: 3 D: -3 ()

2: The product $(-1) \times 225 =$

A: -225 B: 225 C: 224 D: 0 ()

3: The complement of angle $45^\circ =$

A: 90° B: 180° C: 45° D: 100° ()

4: The reciprocal of $\frac{3}{5} =$

A: $\frac{5}{3}$ B: 1 C: 0 D: $-\frac{3}{5}$ ()

5: The mode of the data 1,1,2,4,3,2,1,2,2,4 is

A: 1 B: 2 C: 3 D: 4 ()

SECTION – B

2M X 6 = 12M

6: Write down a pair of integers whose:

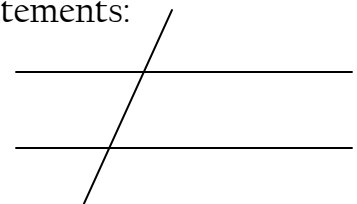
i: Sum is - 7

ii: Difference is -10

7: State the property that is used in each of the following statements:

i: If $a \parallel b$, then $\angle 1 = \angle 5$

ii: If $\angle 4 = \angle 6$, then $a \parallel b$



8: Find:- i) $\frac{1}{2}$ of 24

ii) $\frac{2}{3}$ of 18

9: Find:- i) 1.3×10

ii) 153.7×100

10: Find the mean of first five whole numbers.

11: Find the median of the data:

13, 16, 12, 14, 19, 12, 14, 13, 14

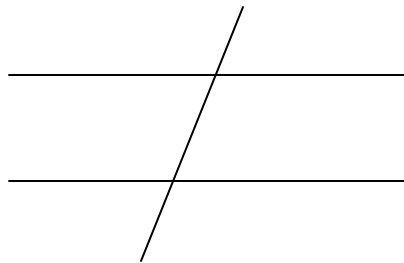
SECTION – C

3M X 5 = 15M

12: Find the product using suitable identity:

$$26 \times (-48) + (-48) \times (-36)$$

13: In the given figure, decide whether line 'l' is parallel to line 'm'.

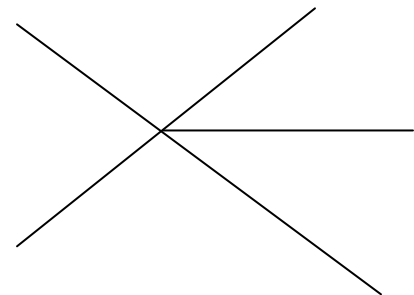


14: In the adjoining figure:

i: Is $\angle 1$ adjoining to $\angle 2$?

ii: Do $\angle COE$ and $\angle EOD$ form a linear pair ?

iii: Is $\angle 1$ vertically opposite to $\angle 4$?



15: Find: i) $0.35 \div 5$

ii) $52.5 \div 10$

iii) $7 \div 3.5$

16: The marks (out of 100) obtained by a group of 10 students in a science test are 85, 76, 90, 85, 39, 48, 56, 95, 81 and 75. Find the:

- i: Highest and the lowest marks obtained by the students.
- ii: Range of the marks obtained.

SECTION – D

4M X 2 = 8M

17: Verify the following:

$$18 \times [7 + (-3)] = 18 \times 7 + [18 \times (-3)]$$

18: Solve: $\frac{7}{10} + \frac{2}{5} + \frac{3}{2}$

BLUE PRINT

S.NO	LESSON NAME	MCQ 1M	VSA Q 2M	SA Q 3M	LA Q 4M	TOTAL MARKS
1	Integers	1+1=2	1	1	1	11
2	Lines and angles	1	1	2		9
3	Fractions and decimals	1	2	1	1	12
4	Data handling	1	2	1		8
		5	6	5	2	40

MARKING KEY

SECTION A

1: B 2: A 3: C 4: A 5: B

SECTION B

6: i: $(-4) + (-3) = -7$ ----- 1M (Any other similar examples)

ii: $(-20) - (-10) = -10$ ----- 1M (Any other similar examples)

7: i: Each pair of corresponding angles are equal ----- 1M

ii: A pair of alternative interior angles are equal ----- 1M

8: i: $\frac{1}{2} \times 24 = 12$ ----- 1M

ii: $\frac{2}{3} \times 18 = 12$ ----- 1M

9: i: 13.0 ----- 1M

ii: 1.537 ----- 1M

10: First five whole numbers 0, 1, 2, 3, 4 ----- 1/2M

$$\text{Mean} = \frac{0+1+2+3+4}{5} \text{ ----- } 1/2M$$

$$= \frac{10}{5} = 2 \text{ ----- } 1M$$

11: Arranging in ascending order ----- 1M

Median = 14 ----- 1M

SECTION C

12: $(-48) \times [26 + (-36)]$ ----- 1M

= $(-48) \times (-10)$ ----- 1M

= 480 ----- 1M

13: $126^\circ + 54^\circ = 180^\circ$ ----- 1M

Pair of interior angles on the same side of the transversal are supplementary ---1M

$l \parallel m$ ----- 1M

14: i) yes ii) yes iii) yes ----- $1 + 1 + 1 = 3$ M

15: i) 0.07 ----- 1M

ii) 5.25 ----- 1M

iii) 2 ----- 1M

16: i) Highest mark = 95 ----- $\frac{1}{2}$ M

Lowest mark = 39 ----- $\frac{1}{2}$ M

ii) Range = Highest mark – lowest mark ----- 1M

= 95 – 39 ----- $\frac{1}{2}$ M

= 56 ----- $\frac{1}{2}$ M

SECTION D

17: LHS = 18×4 ----- 1M

= 72 ----- 1M

RHS = $156 - 54$ ----- 1M

$$= 72 \text{ ----- 1M}$$

18: To find L.C.M = 10 ----- 1M

$$= \frac{7 \times 1 + 2 \times 2 + 3 \times 5}{10} \text{ ----- 1M}$$

$$= \frac{7 + 4 + 15}{10} \text{ ----- 1M}$$

$$= \frac{26}{10} = \frac{13}{5} \text{ ----- 1M}$$

$$= \frac{26}{10} = \frac{13}{5} \text{ ----- 1M}$$

$$= \frac{26}{10} = \frac{13}{5} \text{ ----- 1M}$$