KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

COMPETENCY BASED QUESTIONS

CLASS : VI

NAME OF CHAPTER:1. Knowing Our Numbers

MCQ	
Q1	The product of the place values of 4's I 3546749 is (a) 1600 (b) 16000 (c) 1600000 (d) 16000
Q2	The largest 4 digit number , using any one digit twice, from digits 5,9,2 and 6 is (a) 9692 (b) 9569 (c) 9659 (d) 9965
Q3	Keeping the place of 6 in the number 6350947 same, the smallest number obtained by rearranging other digits is (a) 6975430 (b) 6043579 (c) 6034579 (d) 6034759
Q4	The product of a non – zero whole number and its successor us always (a) An even number (b) An odd number (c) A prime number (d) Divisible by 3
Q5	A whole number is added to 35 and the same number is subtracted from 35. The sum of the resulting number is (a) 0 (b) 70 (c) 77 (d) 53

Q6	Number of even numbers between 58 and 80 is (a) 10 (b) 11 (c) 12 (d) 13
Q7	The successor of 1 million is ----------
Q8	By using dot (●) patterns, which of the following numbers can be arranged in all the three ways namely a line, a triangle and a rectangle? (a) 9 (b) 10 (c) 11 (d) 12
	CASE BASE QUESTIONS
Q.9	There are two factories located at place P and the other at place Q. From these factories, a certain commodity is to be delivered to each of the depots situated at A,B and C. Weekly production of commodity by P and Q are 120 kg and 150 kg respectively. Weekly requirement of commodity by A,B and C are 80 kg, 90 kg and 100 kg respectively . P delivers 60 kg to A, 40 kg to B and 20 kg to C.  1. How much amount of the commodity should Q deliver to A, B and C ? 2. If rate of the commodity is ₹ 50 per kg, find the total amount to be paid to P and Q ? 3. What is the total weekly production of commodity by both P and Q ?

Q. 10	Mohan and Raju go to market for purchasing clothes. Mohan can cover 50 cm in one step and Raju can cover 40 cm in one step. They walked 900 steps.  1. Calculate the distance covered by Mohan. 2. Calculate the distance covered by Raju. 3. Who cover more distance and by how much? 4. If they walk 800 steps in the opposite direction then what is the distance between them. Suggested Ans. 2.1 45000 cm or 450 m 2.2 36000 cm or 360 m 2.3 Mohan, 9000 cm or 90 m more than Raju 2.4 8000 cm or 80 m

Ans key Ch.1	KNOWING YOUR NUMBERS
Q1	c
Q2	d
Q3	c
Q4	a
Q5	b
Q6	a
Q7	1000001
Q8	b
Q9	1. 150 kg 2. ₹13500 3. 270 kg
Q10	1. 45000 cm 2. 36000 cm 3. Mohan more by 900 cm 4. 8000cm

KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

COMPETENCY BASED QUESTIONS

CLASS : VI

NAME OF CHAPTER: 2. Whole Numbers

MCQ	
Q1	Sum of the number of primes between 15 to 80 and 90 to 99 is (a) 20 (b) 18 (c) 17 (d) 16
Q2	The number of distinct prime factors of the smallest 5 – digit number is (a) 2 (b) 4 (c) 6 (d) 8
Q3	If the number 5851*48 is divisible by 22, the digit at * is (a) 4 (b) 5 (c) 6 (d) 7
Q4	The sum of prime factors of 7429 is (a) 56 (b) 57 (c) 58 (d) 59

Q5	The greatest number which always divides the product of the predecessor and successor of an odd natural number other than 1 is (a) 4 (b) 5 (c) 6 (d) 7
Q6	Successor of a 3 – digit number is always a 3 – digit number. (True / False)
Q7	Which of the following statements is not true? (a) Both addition and multiplication are associative for whole numbers. (b) Zero is the identity for multiplication of whole numbers. (c) Addition and multiplication both are commutative for whole numbers. (d) Multiplication is distributive over addition for whole numbers.
Q8	LCM of 17, 23, and 29 is (a) 11439 (b) 11239 (c) 11339 (d) 11539
	CASE BASE QUESTION
Q9	

	Rahul's want mobile number of his friend Sohan. Sohan write his mobile number using alphabets and numbers like – A 8 7 B 5 C 6 D 3 3 And write some numbers 0, 1,2,3,4,5,6,7,8,9. Sohan said find my mobile number by using clues given below. Help Rahul to find Sohan's mobile number . 1. Alphabet A is the largest one digit number. - _____ 2. Alphabet B is the smallest prime number. - _____ 3. Alphabet C is the smallest composite number .- _____ 4. Alphabet D is neither prime and nor a composite number. - _____ 5. Sohan's mobile number is ____ 8 7 ___ 5 ___ 6 ___ 3 3
Q10	A milk seller sell the milk 15 litres, 18 litres and 21 litres to three hotels respectively, he wants to purchase a largest measuring vessel for milk so he can give the milk in exact number of time.

1. In how many hotels milk seller sells the milk?
2. What is the difference between amount of milk for the first and last hotel?
3. Total how much milk, milk seller sells in three hotels?
4. Find the largest measuring vessel by which milk seller can give the milk in exact number of time?

Ans:

Ans key Ch.2	
Q1	c
Q2	a
Q3	c
Q4	d
Q5	a
Q6	false
Q7	b
Q8	c
Q9	1. 9 2. 2 3. 4 4. 1 5. 9872546133
Q10	1. 3 2. 6 LITRES 3. 54 LITRES 4. 3 LITRES

KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

COMPETENCY BASED QUESTIONS

CLASS: VI

NAME OF CHAPTER: PLAYING WITH NUMBERS

	MCQ
Q1	WHAT IS THE SMALLEST DIGIT WHICH CAN BE FILLED IN THE GIVEN SPACE SO THAT THE NUMBER IS DIVISIBLE BY 3: _35485 (A)1 (B)2 (C)3 (D)4
Q2	TWO NUMBERS HAVING ONLY 1 AS A COMMON FACTOR ARE CALLED : (A)PRIME NUMBERS (B)COMPOSITE NUMBERS (C)CO PRIME NUMBERS (D)MULTIPLE NUMBERS
Q3	WRITE A DIGIT IN BLANK SPACE SO THAT THE NUMBER FORMED IS DIVISIBLE BY 11. 8_9485 (A)4 (B)5 (C)6 (D)7
Q4	In which of the following expressions, prime factorisation has been done? (A) 44 = 11 × 4 (B) 36 = 2 × 2 × 9 (C) 60 = 2 × 2 × 3 x 5 (D) 90 =1 x 2 × 3 x 3 x 5
Q 5	The difference between the predecessor of a number and the number it self is (A)1 (B)2 (C)0 (D)NONE OF THESE
Q 6	In a morning walk, three girls reema,sheena and leeta step off together. Their steps

	measure 60 cm, 65 cm and 70 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps? (A)5460 (B)6540 (C)7645 (D)8654
	VERY SHORT
Q 07	A NUMBER IS DIVISIBLE BY BOTH 4 AND 15.BY WHICH OTHER NUMBER WILL THAT NUMBER BE ALWAYS DIVISIBLE?
Q 08	WRITE AN EVEN PRIME NUMBER.
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	Tirth loves lemon juice so he picks up 3 different bottles from the Mall. Bottle P contains 3 litres of lemon juice. Bottle Q contains twice the lemon juice in bottle P and Bottle R contains thrice the lemon juice in bottle Q. (I)The quantity of lemon juice in bottle Q is: (a) 5 litres (b) 4 litres (c)3 litres (d)6 litres (II)The quantity of lemon juice in bottle R is: (a) 5 litres (b) 4 litres (c)3 litres (d)18 litres
Q 10	There are 3 members in a family having different energy requirement per day .Father who is an athlete needs 1500 ml of energy drink, where as grandfather requires 450 ml and the younger one who is a 10 years old school going boy needs 750 ml of energy drink There are three glasses with different measurement: Glass A-100 ml , Glass B-150 ml and Glass C-250 ml. If father chooses glass C to exactly fulfill his energy requirement , how many such glasses will be required by him? (A)4 glasses. (B)15 glasses (C)6 glasses. (D)8 glasses

ANSWER KEY:

(1)B

(2)C

(3)B

(4)C

(5)A

(6)5460

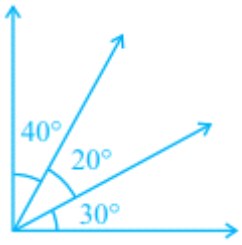
(7)60

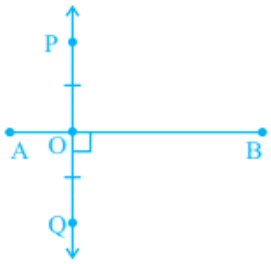
(8)2

(9)(I)D

(II)D

(10)C

KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION	
COMPETENCY BASED QUESTIONS	
CLASS: VI	
NAME OF CHAPTER: BASIC GEOMETRICAL IDEAS	
	MCQ
Q1	The number of diagonals of a triangle is (A) 0 (B) 1 (C) 2 (D) 3
Q2	Number of lines passing through five points such that no three of them are collinear is (A) 10 (B) 5 (C) 20 (D) 8
Q3	If a bicycle wheel has 48 spokes, then the angle between a pair of two consecutive spokes is (A)11/2 (B)15/2 (C)2/11 (D)2/15
Q4	The number of angles in fig are:  (A) 3 (B) 4 (C) 5 (D) 6
Q 5	If the sum of two angles is greater than 180°, then which of the following is not possible for the two angles? (A) One obtuse angle and one acute angle

	(B) One reflex angle and one acute angle (C) Two obtuse angles (D) Two right angles
Q 6	A polygon has prime number of sides. Its number of sides is equal to the sum of the two least consecutive primes. The number of diagonals of the polygon is (A) 4 (B) 5 (C) 7 (D) 1
	ASSERTION- REASON / VERY SHORT
Q 07	In Fig, PQ ⊥ AB and PO = OQ. Is PQ the perpendicular bisector of line segment AB? Why or why not? 
Q 08	Write the measure of smaller angle formed by the hour and the minute hands of a clock at 7 O' clock.
	CASE BASED/SOURCE BASED / PASSAGE BASED Fifteen (15) children are playing in the park. Out of them, seven (7) named A, B, C, D, E, F and G are standing in the form of figure given below. They all have some items in their hand like A has box of candies, B has apples, C has can of cake, D,E and F have birthday cap, oranges, and scenery photo frame respectively. Now, G asked some questions to rest of the eight (8) children. The one who gives right answer will get one of the prizes which the children have. Answer the following two questions based on the above paragraph.
Q 09	On which of the following object we can draw straight line? Pick the correct answer. (A) Surface of box (B) Orange (C) Curved face of birthday cap (D) Curved face of can of cake
Q 10	(A) Line segment joining two points F and B on the circle is----------. (B)Chord passing through G ----------.

ANSWER KEY

(1)A

(2)D

(3)B

(4)D

(5)D

(6)B

(7)NO, since AB is the perpendicular bisector of line segment PQ

(8)150 degrees

(9)A

(10)(A)CHORD

(B)DIAMETER

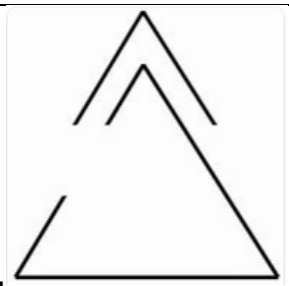
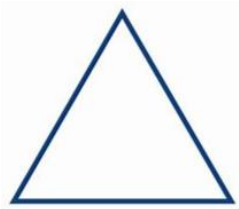
KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

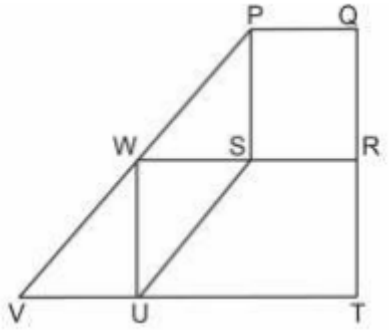
COMPETENCY BASED QUESTIONS

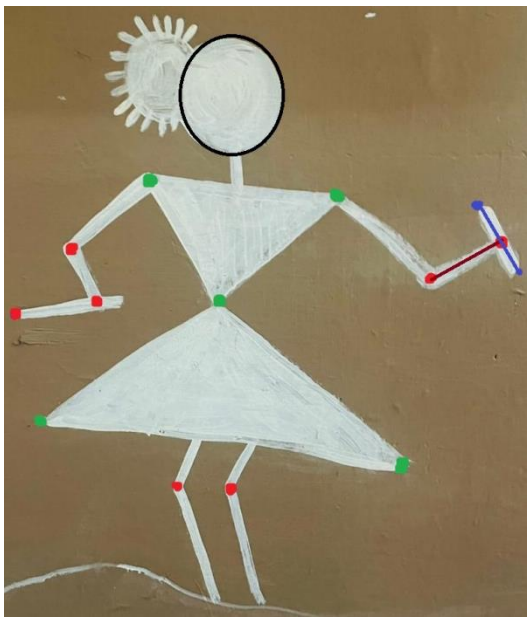
CLASS: 6

NAME OF CHAPTER: UNDERSTANDING ELEMENTARY SHAPES

	MCQ
Q1	The number of edges of the following shape: (Source of picture – wall painting of KV ONGC Surat)  a) 3 b) 5 c) 6 d) 7
Q2	Some books are placed on a wooden shelf as shown . How many books are NOT perpendicular to the wooden shelf?  a) 3 b) 2 c) 7 d) 1
Q3	A polygon has prime number of sides. Its number of sides is equal to the sum of the two least consecutive primes. The name of polygon is a) Triangle b) Quadrilateral c) Pentagon d) Hexagon
Q4	Which of the following is/are not triangle/triangles

	1.  2.  3.  4.  a) Diagrams 1,2 and 3 b) Diagrams 3 and 4 c) Diagrams 1,3 and 4 d) Diagrams 1and 2
Q 5	If the sum of two angles is equal to an obtuse angle, then which of the following is not possible? a) One obtuse angle and one acute angle. b) One right angle and one acute angle. c) Two acute angles d) Two right angles.
Q 6	Consider the alphabets below. A E U O L P I T K How many alphabets have at least one perpendicular line? a) One b) Two c) Three d) Four
	ASSERTION- REASON / VERY SHORT
Q 07	Assertion (A) – When we measure of the length of a line segment by a ruler, there may be some errors due to its thickness and angular viewing, these errors can be removed by measuring a line segment with the help of a divider Reason (R) – The use of divider is better than a ruler. a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A c) A is true but R is false

	d) A is false but R is true
Q 08	Assertion (A) – When the time is 11 o'clock, the angle formed between the hour hand and the minute hand is an acute angle. In other words, 30°, 40°, 57°, and so on are all acute angles Reason (R) – Acute angles measure less than 90 degrees a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A c) A is true but R is false d) A is false but R is true
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	The figure given below shows a tyre of bicycle, which contains 16 spokes . starting from spoke 1 count the spokes clockwise  i. What type of angle does Spoke 1 make with Spoke 11 clockwise ? ii. Write two pairs of spokes which makes right angles ? iii. Spoke 11 makes a straight angle with spoke _____ . (write number of spoke). iv. Is the tyre consists of triangles ? if yes write the number of triagles .
Q 10	The figure below shows the combination of different shapes 

	In the figure US is parallel to WP and UV parallel to QP. PQ=QR=RS=SP , WR=TU and RT = WU. Answer the following questions: i. Write the name of different shapes you find in the figure . ii. Which of the following quadrilateral is regular a) PQRS b) PSUV c) RWUT d) PQTV iii. Arun joins S and Q. SQ is an extension of US. Which type of quadrilateral is PQUV? Justify your answer
Q11	Observe the picture carefully: (tear the picture from worksheet and paste in your answer book)  (Source – wall painting of KV ONGC Surat) i. Name all the vertices you find in the picture. ii. Write the different kinds of shapes you find in the picture. iii. Is there any pair of perpendicular line segments ? If yes, write their name . iv. How many triangles are there in the picture? Mention their names and types .

ANSWER KEY CHAPTER – 5 UNDERSANDING ELEMENTARY SHAPES

	MCQ
Q1	7
Q2	3
Q3	Pentagon
Q4	Diagrams 1and 2
Q 5	Two right angles.
Q 6	Four
	ASSERTION- REASON / VERY SHORT
Q 07	Both A and R are true but R is not the correct explanation of A
Q 08	Both A and R are true and R is the correct explanation of A
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	i. OBTUSE ANGLE ii. ANSWERS iii. Spoke 3 iv. NO
Q 10	i. TRIANGLES , QUADRILATERALS ii. PQRS iii. PARALLELOGRAM
Q11	Answer depends on students' observation.

KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

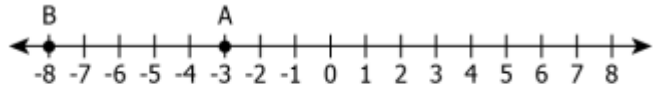
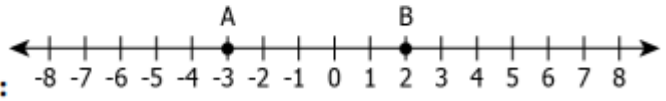
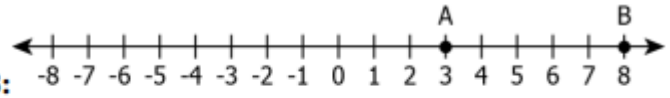
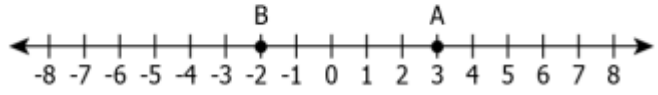
COMPETENCY BASED QUESTIONS

CLASS: 6

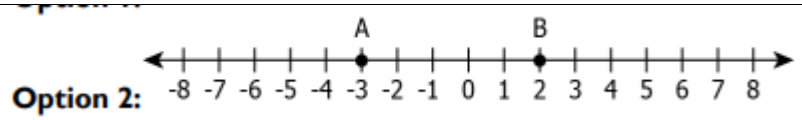
NAME OF CHAPTER: INTEGERS

	MCQ
Q1	Sum of two negative number is always (a) Positive (b) Negative (c) 0 (d) 1
Q2	The successor of -4 is a) -5 b) 5 c) 3 d) -3
Q3	The preceding number of smallest whole number is a) Smallest positive number b) Greatest negative number c) Smallest natural number d) Smallest prime number
Q4	Which of the following is true ? a) 100 = -100 b) -100 > 0 c) 123< -231 d) 0> -100
Q 5	What is the result obtained on subtracting 98 from the sum of –126 and 154? a) 126 b) 70 c) -70 d) -126
Q 6	Which set shows all numbers less than 0? a) 12, 23, 37 b) –15, 0, 15 c) –28, –9, 0 d) –54, –43, –39
	ASSERTION- REASON / VERY SHORT

Q 07	Assertion (A) –Greatest negative integer is – 1. Reason (R) – Farther a number from zero on the left, larger is its value. a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A c) A is true but R is false d) A is false but R is true
Q 08	Assertion (A) – Addition of -4 and -10 is -14 Reason (R) – When two negative integers are added, we get a positive integer a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A c) A is true but R is false d) A is false but R is true
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	The picture below shows the control panel of a lift in the mall  0 is the ground floor. The two wheeler parking area '-1' is at basement level 1 and the car parking area '-2' is at basement level 2. i. Ahmed enters the lift at Floor 3 and exits at the two-wheeler parking area. How many floors did the lift go down ? ii. Meera entered the lift at the car parking floor. She pressed '6' at control panel of the lift . how many floors up does she wants to go ?

	iii. Akhil enters the lift at smallest prime numbered floor and goes 2 floors down, now he wants to reach at smallest composite numbered floor .How many floors will the lift go up ?
Q 10	Aakriti has a certain amount of money. She spends more money than she has by borrowing some money from her friend. Aakriti made the following statements. Statement I: The initial amount of money she has is represented by a positive integer. Statement II: The amount she spent is represented by a negative integer. Which of these statements is/are true? a) Only statement I b) Only statement II c) Both statements I and II d) Neither statement I nor statement I
Q 11	Ajay plots two points A and B on the number line. Point A lies 3 points to the left of zero. Point B lies 5 points to the right of point A. Which of these options correctly represents the points A and B? **Option 1:**  **Option 2:**  **Option 3:**  **Option 4:** 

ANSWER KEY CHAPTER - INTEGERS

	MCQ
Q1	Negative
Q2	-3
Q3	Greatest negative number
Q4	Which of the following is true ? e) 100 = -100 f) -100 > 0 g) 123< -231 h) 0> -100
Q 5	-70
Q 6	–54, –43, –39
	ASSERTION- REASON / VERY SHORT
Q 07	A is true but R is false
Q 08	A is true but R is false
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	i. 4 floors ii. 8 floors iii. 4 floors
Q 10	Both statements I and II
Q 11	 **Option 2:**

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COMPETENCY BASED QUESTIONS

CLASS: VI

NAME OF CHAPTER : FRACTIONS

	MCQ
Q1	What fraction of an hour is 35 minutes? a) $\frac{5}{10}$ b) $\frac{2}{3}$ c) $\frac{4}{5}$ d) $\frac{7}{12}$
Q2	Manish had a brown pouch in which he put 3 red balls, 7 green balls, 4 yellow balls, 9 purple balls and 2 blue balls. What fraction of Green balls is there in the pouch out of total balls? a) $\frac{4}{23}$ b) $\frac{7}{28}$ c) $\frac{7}{25}$ d) $\frac{9}{28}$
Q3	If a whole of an object is divided into a number of equal parts, then each part represents a fraction. a) True b) False
Q4	Determine : $\frac{3}{4}$ of 32 books a) 24 books b) 26 books c) 20 books d) 28 books
Q 5	The food we eat remains in the stomach for a maximum of 4 hours. For what fraction of a day, does it remain there and what fraction does it remain empty?
Q 6	Kavita has 44 cassettes. She gives $\frac{3}{4}$ of them to Sonia. How many does Kavita keep?

	ASSERTION- REASON / VERY SHORT
Q 07	Assertion : Fraction $\frac{4}{9}$ is obtained when we divide a whole into nine equal parts and take four parts Reason: A fraction is a number Representing part of a whole. (a)Both A and R are true and R is the correct explanation of A. (b)Both A and R are true and R is not the correct explanation of A. (c)A is true but R is false (d)A is false but R is true
Q 08	Assertion: A proper fraction whose numerator is 1 and denominator is 3. Reason: Proper fraction is a fraction whose numerator is smaller than its denominator (a)Both A and R are true and R is the correct explanation of A. (b)Both A and R are true and R is not the correct explanation of A. (c)A is true but R is false (d)A is false but R is true
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	Cross country is a running event in which runners completed a pre-decided distance. It includes different activities in which runners cover different environments. A cross country running event of 11 km is as follows.

	<table><tr><th>Activity</th><th>Distance (in km)</th></tr><tr><td>Running on paved road</td><td>3</td></tr><tr><td>Running on unpaved road</td><td>2</td></tr><tr><td>Hill climbing</td><td>2</td></tr><tr><td>Mud run</td><td>1</td></tr><tr><td>Running in woods</td><td>2</td></tr><tr><td>Crossing water bodies</td><td>1</td></tr></table> 1. What fraction of the total distance is the mud run? a) $\frac{1}{11}$ b) $\frac{2}{11}$ c) $\frac{1}{12}$ d) $\frac{3}{12}$ 2. Pawan says, 'By running through woods and climbing hills, half of the total distance in cross country can be covered.' Is Pawan correct? How did you reach the conclusion? 3. Kamla completed the cross country in 1 hour. She completed the run on the paved and unpaved roads in one-fourth of an hour while Juli covered it in half an hour. In how many minutes did Kamla cover the distance on the paved and unpaved roads? a) 10 min b) 15 min c) 30 min d) 20 min
Q 10	Parul and two of her friends share a pizza equally among themselves.

Which fraction represents one part of the whole pizza?

a) $\frac{1}{4}$

b) $\frac{2}{3}$

c) $\frac{1}{3}$

d) $\frac{3}{3}$

	ANSWERS
Q1	d) $\frac{7}{12}$
Q2	c) $\frac{7}{25}$
Q3	a) True
Q4	a)24 books
Q5	Fraction of a day when food remains in the stomach = $\frac{4}{24} = \frac{1}{6}$ Fraction of a day when stomach remain empty = = $\frac{20}{24} = \frac{4}{5}$
Q6	Number of cassettes Kavita keep = $\frac{1}{4}$ x 44 = 11 cassettes
Q7	(a)Both A and R are true and R is the correct explanation of A.
Q8	(a)Both A and R are true and R is the correct explanation of A.
Q9	1. a) 1/11 2. No, Pawan is not correct because by running through woods and climbing hills only 4 km distance is covered but the half of the total distance is 5.5 km. 3. b) 15 min
Q10	c)1/3

KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

COMPETENCY BASED QUESTIONS

CLASS: VI

NAME OF CHAPTER: DECIMALS

	MCQ
Q1	Express 74 m as km using decimals. a) 7.4 km b) 0.74 km c) 7.04 km d) 0.074 km
Q2	There are five men sitting in a car, each weighing 55 kg. Find the weight of car if total weight of car and men is 1500.300 kg. a) 1200.700 kg b) 1225.300 kg c) 1175.700kg d) 1300 kg
Q3	Ravi and Raju measured the lengths of their pencils. Ravi's pencil was 7 cm 5 mm long and Raju's pencil was 8 cm 3 mm long. They knew how to write rupees and paise using decimals. Ravi's pencil length in decimal? (a) 7.05 cm (b) 7.5 cm (c) Both of these (d) None of These
Q4	Manoj brought 1 liter milk, he spend 250 ml milk in making of tea. Find the amount of milk left? a) 0.700 liter b) 250 ml c) 0.750 liter d) 650 ml
Q 5	We can get same result by 1.8 – 1.2 and 1.08 – 1.20 a) True b) False
Q 6	12.035 km = a) 12 km + 350 m b) 12 km + 35 m c) 12 km + 35 km d) 12 km + 3 m
	ASSERTION- REASON / VERY SHORT
Q 07	Ritesh's height is 162.9 cm and Aarav's height is 163.2 cm. What is the difference between their heights?
Q 08	Tahir travelled 29 km and 500 m on Monday and 45 km 900 m on Tuesday. Calculate the distance he travelled in total.
	CASE BASED/SOURCE BASED / PASSAGE BASED

Q 09	Suraj provides laundry services to nearby areas. The charges for wash and folds are calculated per kilogram of the weight of the clothes. The table below shows the weight of the cloths for washing and folding from four houses. **House Number** / **Weight of Clothes Collected (in kg)** 216 — 5.60 324 — 3.95 159 — 7.37 228 — 6.72 1. Which house will pay the most? (a) House number 216 (b) House number 324 (c) House number 159 (d) House number 228 2. What is the total weight of the clothes collected for washing and folding?
Q 10	The picture shows the nutritional information on a packet of cookies. **NUTRITIONAL INFORMATION PER 100g (Approx.)** Carbohydrate — 70 g Sugars — 24.5 g Protein — 7 g Fat — Saturated Fatty Acids — 9 g Monounsaturated Fatty Acids — 8.2 g Polyunsaturated Fatty Acids — 2.7 g Trans Fatty Acids — 0 g Cholesterol — 0 g Energy — 488kcal

	The cookies contain four types of fats. 1. Which fat content is the highest in the cookies? (a) Saturated fatty acids (b)Monounsaturated fatty acids (c) Polyunsaturated fatty acids (d)Trans fatty acids 2. The sugar content in the cookies is more than three times the protein content. Do you agree with this statement? Give reasons

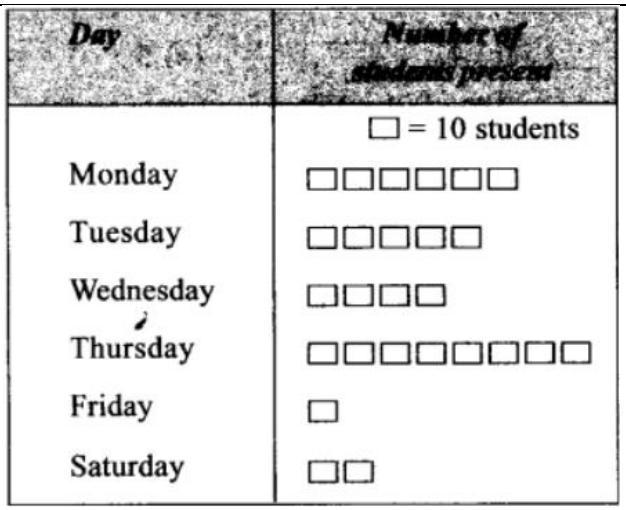
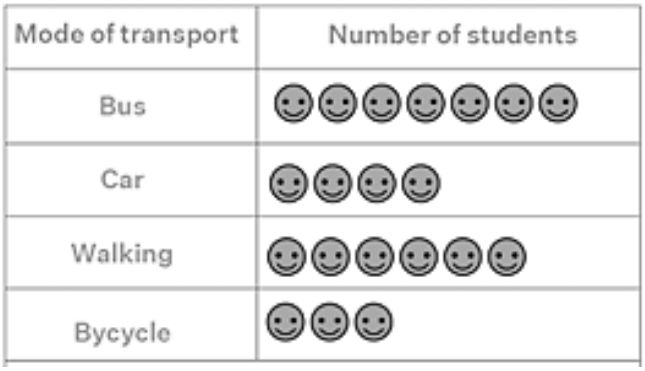
	ANSWERS
Q1	d)0.074 km
Q2	b)1225.300 kg
Q3	(b) 7.5 cm
Q4	c) 0.750 liter
Q5	b) False
Q6	b) 12 km + 35 m
Q7	0.3 cm
Q8	75 km 400 m
Q9	1.(c)House Number 159 2. 5.60 + 3.95 + 7.37 + 6.72 = 23.64 kg
Q10	1.(a) Saturated fatty acids 2. Yes, The sugar content in the cookies is more than three times the protein content. Three times of protein content is 7 x 3 = 21 g while sugar content is 24.5 g. So, 24.5 > 21.

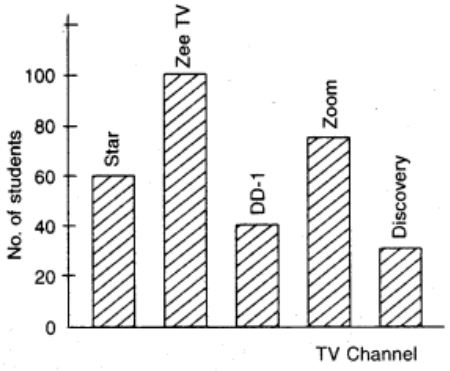
KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

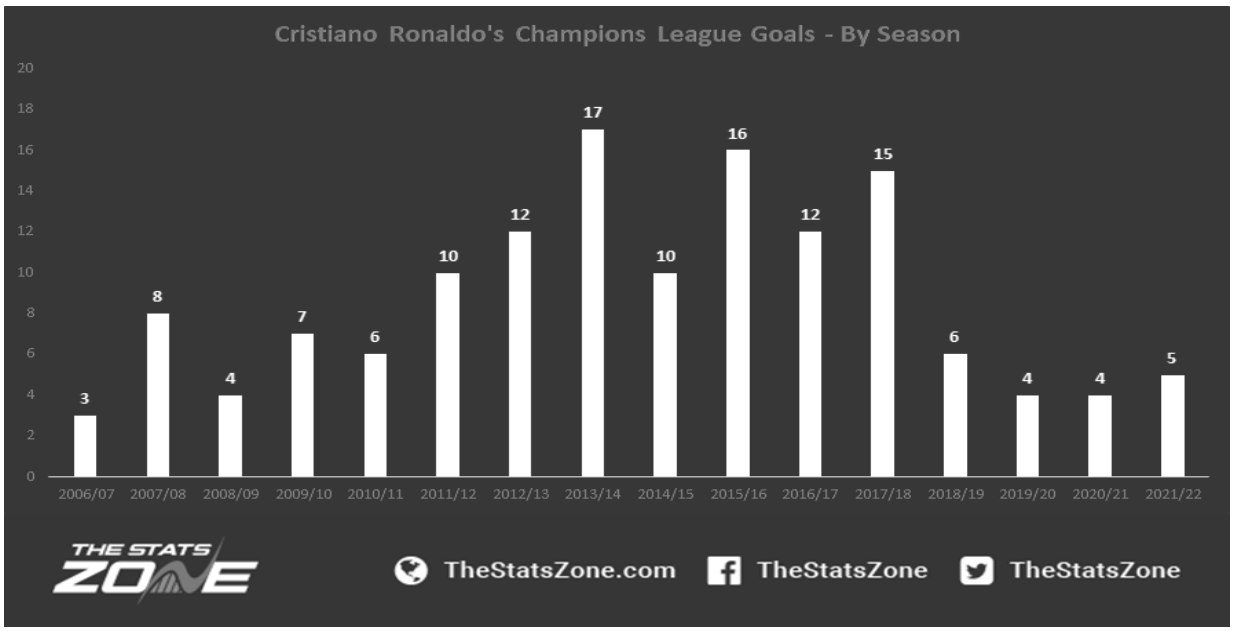
COMPETENCY BASED QUESTIONS

CLASS: VI

NAME OF CHAPTER: DATA HANDLING

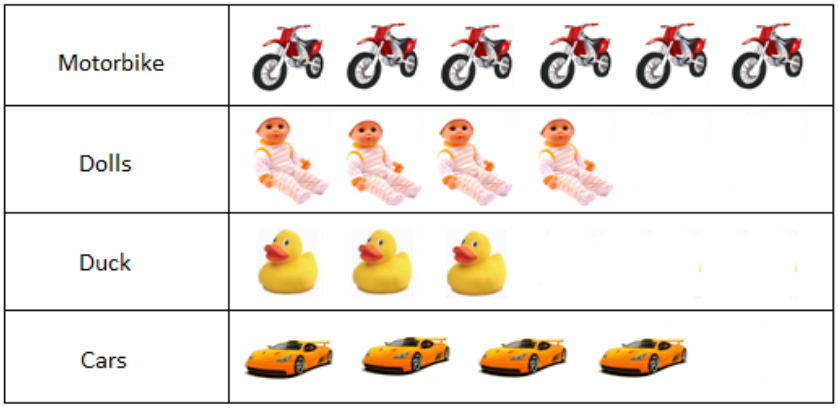
	MCQ
Q1	Which of the following tally mark represents 11. a)  b)  c)  d) 
Q2	 On how many days more than 20 students were present (a) 6 (b) 5 (c) 4 (d) 0
Q3	Which mode of transport is most popular  (a) Bus (b)Car (c) Walking (d) Bicycle

Q4	Which is the least popular TV Channel among students  a) Star b) Zee TV c) DD1 d) Discovery
Q 5	The marks (out of 10) obtained by 28 students in a Mathematics test are listed as below: 8, 1, 2, 6, 5, 5, 5, 0, 1, 9, 7, 8, 0, 5, 8, 3, 0, 8, 10, 10, 3, 4, 8, 7, 8, 9, 2, 0 The number of students who obtained marks more than or equal to 5 is (A) 13 (B) 17 (C) 15 (D) 16
Q 6	The choices of the fruits of 42 students in a class are as follows: A , O , B , M , A , G , B , G , A , G , B , M , A , G , M , A , B , G , M , B , A , O , M , O , G , B , O , M , G , A , A , B , M , O , M , G , B , A , M , O , M , O, where A, B, G, M and O stand for the fruits Apple, Banana, Grapes, Mango and Orange respectively. Which two fruits are liked by an equal number of students? (A) A and M (B) M and B (C) B and O (D) B and G
	VERY SHORT

Q 07	 *Goal involvement = Goals + Assist From the above data table who has the better goal involvement in UEFA Champions League competition.
Q 08	Which season was the best UEFA champions League season for Cristiano Ronaldo. (Refer stats below) 
	CASE BASED/SOURCE BASED / PASSAGE BASED

Q 09	The followig pictograph shows the sale of four ifferent toys on a day. Study the pictograph and answr the questions.

Toys sold in a day



Toy	Price in Rs.
Motorbike	300
Dolls	800
Duck	150
Cars	1100

* Revenue = Price x Number of pieces sold

i) What is the difference in the number for the toy which is sold in maximum number and the toy which is sold in minimum number?
ii) Which toy brings in the maximum revenue ?
iii) What is the total revenue of the shop on the day ?

Q 10 Following are the choices of games of 40 students of Class VI:

football, cricket, football, kho-kho, hockey, cricket, hockey, kho-kho, tennis, tennis, cricket, football, football, hockey, kho-kho, football, cricket, tennis, football, hockey, kho-kho, football, cricket, cricket, football, hockey, kho-kho, tennis, football, hockey, cricket, football, hockey, cricket, football, kho-kho, football, cricket, hockey, football.

(a) Arrange the choices of games in a table using tally marks.

(b) Which game is liked by most of the students?

(c) Which game is liked by minimum number of students?

ANSWER KEY

1. c - 𝍸𝍸|
2. c -4
3. a- bus
4. d- discovery
5. b -17
6. d- B & G
7. Ronaldo , Messi =114+33 =147
   Ronaldo= 128+37=165
8. 2013-14 – (17 goals)

9. I) Max – Min = 6- 3 = 3
   ii) Cars = 4x1100=4400
   iii) Total revenue = 6x300+4x800+3x150+4x1100
   = 1800 +3200 +450+4400
   =9,850/-

10. i) According to the data

Name of the game	Tally marks	Number of students
Cricket	𝍸||||	9
Football	𝍸 𝍸|||	13
Hockey	𝍸|||	8
Kho - kho	𝍸 |	6
Tennis	||||	4

ii) Football -13 students

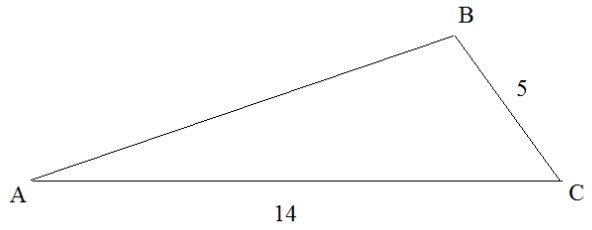
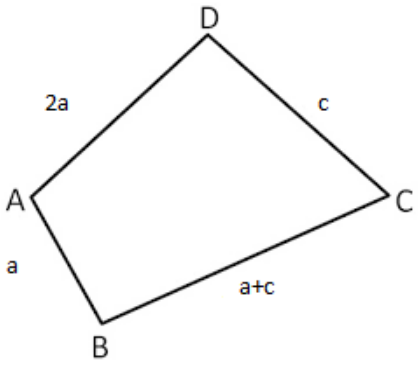
iii) Tennis- 4 students

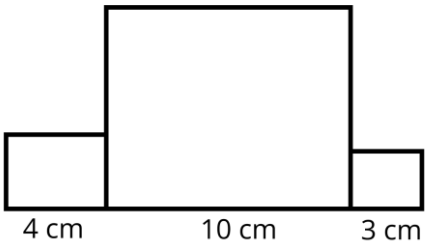
KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

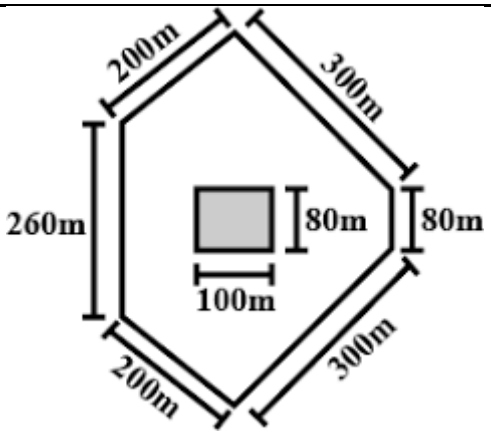
COMPETENCY BASED QUESTIONS

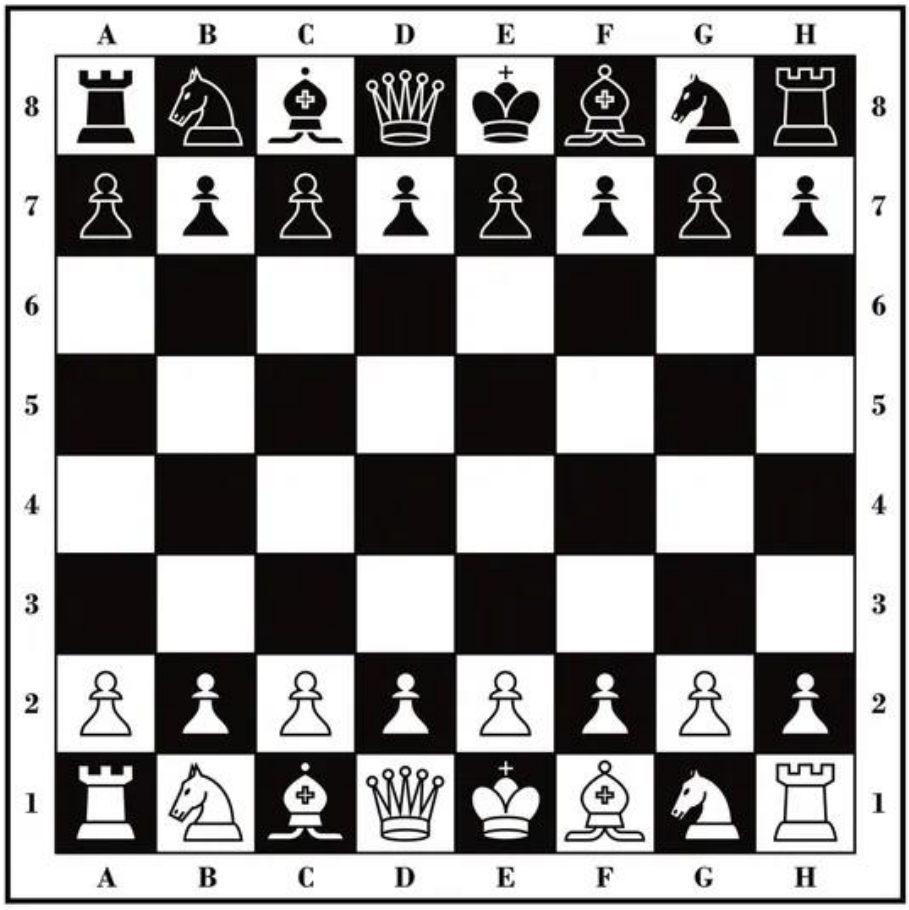
CLASS: VI

NAME OF CHAPTER : Mensuration

	MCQ
Q1	Ravi wants to fence his yard what measurement does he need to take a) Diagonal Length b) Perimeter c) Area d) Length of longest side
Q2	If the perimeter is 30units then the length of side AB is  (a) 6 (b) 5 (c) 10 (d) 11
Q3	The side of a square is 5cm. How many times does the area increase, if the side of the square is doubled? (a) Twice (b) Four Times (c) Thrice (d) Five Times
Q4	Calculate the perimeter for the following figure  a) 3a+2c b) 4a+3c c) 3a+3c d) 4a+2c

Q 5	How many tiles whose length and breadth are 4 cm and 2cm respectively will be needed for a rectangular hall whose length and breadth are 64 cm and 8 cm ? (a) 200 (b) 240 (c) 16 (d) 64
Q 6	Sachin takes 10 rounds of a rectangular park, 50 m long and 20 m wide. Find the total distance covered by him. a) 700 b) 140 c) 1400 d) 70
	VERY SHORT
Q 07	Four regular hexagons are drawn so as to form the design as shown in below figure. If the perimeter of the design is 28cm, find the length of each side of the hexagon 
Q 08	Three squares are joined together as shown in below figure. Their sides are 4cm, 10cm and 3cm. Find the perimeter of the figure. 
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	Society Park :

	 i) What is the length of the outer boundary of the park shown in the below figure? ii) What will be the total cost of fencing it at the rate of Rs 20 per metre? iii) There is a rectangular flower bed in the center of the park. Find the cost of manuring the flower bed at the rate of Rs. 50 per square metre.
Q 10	Chess Board : Chess is one of the oldest and most popular board games. It is played by two opponents on a checkered board with specially designed pieces of contrasting colours, commonly white and black. The objective of the game is to capture the opponent's king. A chess board has 8 columns and 8 rows as shown in the figure below.



The area of each square on a chess board is 4 sq cm

i)Find the area of the board.

ii) At the beginning of the game when all the chess men are put on the board, write the area of the squares left unoccupied.

iii) Find the area of the squares occupied by white chess men.

ANSWER KEY

1. b- Perimeter
2. d -11
3. b- four times
4. d-4a+2c
5. d-64
6. c-140
7. side length = perimeter / number of sides = 28 / 14 = 2cm
8. 4+4+6+10+7+3+3+3+10+4=54cm
9. i) length of the boundary = Perimeter
   =200 + 300 + 80 + 300 + 200 + 260
   =1340 m

   ii) Total cost of fencing = Perimeter x Rate of fencing
   = 1340 x 20
   = 26,800

   iii) Area of rectangular flower bed = length x breadth = 100 x80
   =8000 sq cm

   Total cost manuring the flower bed
   = Area of flower bed x Rate of manuring
   = 8000 x 50
   =40,000/- Rs.

10. i) Number of square blocks = 8 rows x 8 Columns =64
    Area of each square is = 4 sq cm.
    Area of the chess board = 64 x 4 = 256 sq cm.

    ii) Number of square vacant blocks
    = Total blocks - Occupied Blocks
    = 64 -32
    =32
    Thus area of vacant blocks = 32 x 4 sq cm = 128 sq. cm.

    iii) Number of white chess men = 16
    Area occupied = Number of white chessmen x 4 sq cm
    = 16 x 4
    =64 sq cm.

KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

COMPETENCY BASED QUESTIONS

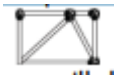
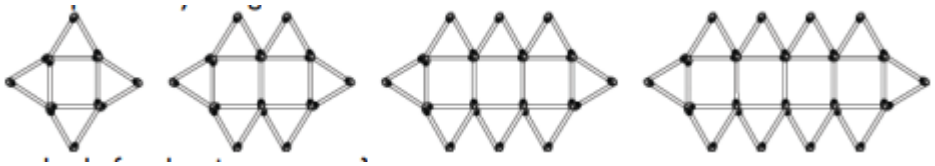
CLASS: VI

NAME OF CHAPTER : ALGEBRA

	MCQ
Q1	4a equals (A) 4 + a (B) 4 × a (C) a × a × a × a (D) 4a × 4a × 4a × 4a
Q2	8 more than three times the number x can be represented as (A) 8 + x + 3 (B) 3 x – 8 (C) 3 x + 8 (D) 8 x + 3
Q3	10 – x means (A) 10 is subtracted x times (B) x is subtracted 10 times (C) x is subtracted from 10 (D) 10 is subtracted from x
Q4	Savitri has a sum of Rs x. She spent Rs 1000 on grocery, Rs 500 on clothes and Rs 400 on education, and received Rs 200 as a gift. How much money (in Rs) is left with her? (A) x – 1700 (B) x – 1900 (C) x + 200 (D) x – 2100
Q 5	In algebra, a × b means ab, but in arithmetic 3 × 5 is (A) 35

	(B) 53 (C) 15 (D) 8
Q 6	The cost of a closet is Rs. 19 less than 4 times the cost of a table. The cost of a sofa is Rs. 5 more than 2 times the cost of a table. If the cost of the sofa is s, which expression gives the cost of the closet? Option 1: 2s + 29 Option 2: 8s + 1 Option 3: 2s – 29 Option 4: 8s – 1
	ASSERTION- REASON / VERY SHORT
Q 07	Assertion (A) – The expression for '1' subtracted from p' is p-1. Reason (R) – any equation like the above is a condition on a variable. It is satisfied only for a definite value of the variable. a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A c) A is true but R is false d) A is false but R is true
Q 08	Assertion: x+x=2x Reason : A number is being added to itself is actually a twice of that number. a) Both A and R are true and R is the correct explanation of A b) Both A and R are true but R is not the correct explanation of A c) A is true but R is false d) A is false but R is true
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	A worker is paid Rs. x for the first 6 hours she works each day. She is paid Rs. y per hour for each hour she works in excess of 6 hours. During one week she works 7 hours on Monday, 9 hours on Tuesday,

	10 hours on Wednesday, 10 hours on Thursday and 7 hours on Friday. What is her average daily wage in rupees for the 5-days?
Q 10	Who am I? (i) Go round a square Counting every corner Thrice and no more! Add the count to me To get exactly thirty four! (ii) For each day of the week Make an upcount from me If you make no mistake You will get twenty three! (iii) I am a special number Take away from me a six! A whole cricket team You will still be able to fix! (iv) Tell me who I am I shall give a pretty clue! You will get me back If you take me out of twenty two!
11	Anagha, Sushant and Faizal are climbing the steps to a hill top. Anagha is at the step p. Sushant is 10 steps ahead and Faizal is 6 steps behind Anagha. Where are Sushant and Faizal?

	The total number of steps to the hill top is 3 steps less than 8 times what Anagha has reached. Express the total number of steps using p.
12	Consider the pattern of shapes made using matchsticks  Another matchstick is added to the first shape of the pattern to get:  If similarly, matchsticks are added to each shape, how will the relationship in the pattern change? Option 1: It will decrease by n matchsticks Option 2: It will increase by n matchsticks Option 3: It will decrease by n + 1 matchsticks Option 4: It will increase by n + 1 matchsticks
13	Abhinav makes a pattern by using matchsticks as shown:  What is the general rule for the given pattern? Option 1: 12n Option 2:16n Option 3: 7n + 5 Option 4: 5n + 7
14	Rishabh identified that there is an error in a book. The error is in the following statement. “7p − 27 is an example of an equation” Which of these is a way to fix the error? Option 1: replace 27 with 7

	Option 2: replace 27 with 1 Option 3: replace minus sign with plus sign Option 4: replace minus sign with equal sign
15	Consider the following. The cost of a crayon pack is Rs. (2c – 5), where c is the cost of a paint brush. Which of these describes the situation? Option 1: The cost of a crayon pack is Rs. 5 less than twice the cost of a paint brush. Option 2: The cost of a crayon pack is Rs. 2 less than five times the cost of a paint brush. Option 3: The cost of a crayon pack is Rs. 2 less than five more than the cost of a paint brush. Option 4: The cost of a crayon pack is Rs. 5 less than two more than the cost of a paint brush.

Answer Key

1	B
2	C
3	C
4	A
5	C
6	Option 3
7	A
8	A
9	
10	(i)There are 4corners in a square. Thrice the number of corners in the square will be $3 \times 4 = 12$ When this result, i.e. 12, is added to the number, it comes to be 34. Therefore, the number will be the difference of 34 and 12 i.e., $34 - 12 = 22$ (ii) 23 was the result when the old number was up counted on Sunday. 22 was the result when the old number was up counted on Saturday. 21 was the result when the old number was up counted on Friday. 20 was the result when the old number was up counted on Thursday. 19 was the result when the old number was up counted on Wednesday. 18 was the result when the old number was up counted on Tuesday. 17 was the result when the old number was up counted on Monday. Therefore, number taken at the start = $17 - 1 = 16$ (iii) In a cricket team, there are 11 players. Hence, the number is such that when 6 is subtracted from it, the result is 11. Therefore, the number is $11 + 6 = 17$

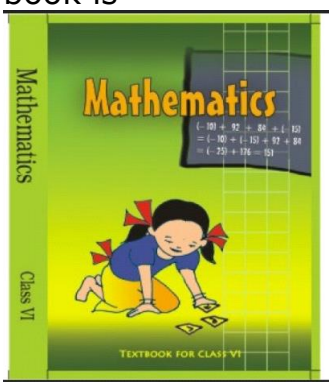
	(iv) The number is such that when it is subtracted from 22, the result is again the number itself. The number is 11, which again gives 11, when it is subtracted from 22.
11	Anagha is at step p. Sushant is 10 steps ahead of Anagha. That is, he is at the step p + 10. Faizal is 6 steps behind Anagha. That is, he is at step p – 6. 8 times of p = 8p 3 less than 8p = 8p – 3 So, the total number of steps = 8 p – 3
12	Option 2
13	Option 3
14	Option 4
15	Option 1

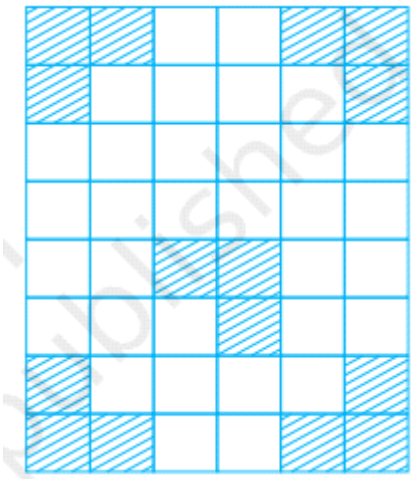
KENDRIYA VIDYALAYA SANGATHAN AHMEDABAD REGION

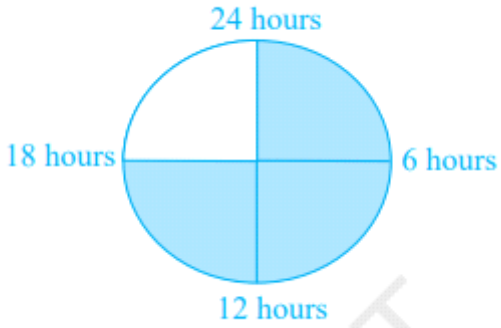
COMPETENCY BASED QUESTIONS

CLASS:VI

NAME OF CHAPTER : RATIO & PROPORTION

	MCQ
Q1	The length and breadth of a steel tape are 10m and 2.4cm, respectively. The ratio of the length to the breadth is (A) 5 : 1.2 (B) 25: 6 (C) 625: 6 (D) 1250: 3
Q2	The ratio of the number of sides of a square to the number of edges of a cube is (A) 1 : 2 (B) 3 : 2 (C) 4 : 1 (D) 1 : 3
Q3	Mathematics textbook for Class VI has 320 pages. The chapter 'symmetry' runs from page 261 to page 272. The ratio of the number of pages of this chapter to the total number of pages of the book is  (A) 11 : 320

	(B) 3 : 40 (C) 3 : 80 (D) 272 : 320
Q4	In a box, the ratio of red marbles to blue marbles is 7:4. Which of the following could be the total number of marbles in the box? (A) 18 (B) 19 (C) 21 (D) 22
Q 5	There are 'b' boys and 'g' girls in a class. The ratio of the number of boys to the total number of students in the class is: (A)b/(b +g) (B)g/(b +g) (C)b/g (D) (b+g)/g
Q 6	The greatest ratio among the ratios 2 : 3, 5 : 8, 75 : 121 and 40 : 25 is (A) 2 : 3 (B) 5 : 8 (C) 75 : 121 (D) 40 : 25
	ASSERTION- REASON / VERY SHORT
Q 07	Find the ratio of the shaded portion to the unshaded portion in Fig. 
Q 08	20 tons of iron costs Rs 600000. Find the cost of 560kg of iron.HINT :1 ton = 1000kg
	CASE BASED/SOURCE BASED / PASSAGE BASED
Q 09	Sleeping time of a python in a 24 hour clock is represented by the

	shaded portion in Fig.  The ratio of sleeping time to awaking time is _____.
Q 10	Sports are very important for developing a healthy and strong body. Sports play a great role in improving and maintaining the health and fitness throughout in human lives, improving mental skills and concentration level. The annual sports day of our school is going to be held on 8th August. On this occasion, all the participants will be divided in three groups and respective sports group such as primary level, secondary level and senior secondary level. The number of participants will be 20, 30 and 50 respectively. What will be the ratio between participants of primary group and senior secondary group? (A) 2:3 (B) 3:5 (C) 2:5 (D) 5:2

ANSWER KEY

(1)D

(2)D

(3)C

(4)D

(5)A

(6)D

(7)5:11

(8)16800

(9)3:1

(10)C