

REVISION ASSIGNMENT CLASS 7 MATHS

SIMPLE EQUATIONS

Q.1 The solution of which of the following equations is neither a fraction nor an integer?

- (a) $2x + 6 = 0$ (b) $3x - 5 = 0$
(c) $5x - 8 = x + 4$ (d) $4x + 7 = x + 2$

Q.2 The equation which cannot be solved in integers is

- (a) $5y - 3 = -18$ (b) $3x - 9 = 0$
(c) $3z + 8 = 3 + z$ (d) $9y + 8 = 4y - 7$

Q.3 If $7x + 4 = 25$, then x is equal to

- (a) $\frac{29}{7}$ (b) $\frac{100}{7}$ (c) 2 (d) 3

Q.4 Which of the following equations can be formed starting with $x = 0$?

- (a) $2x + 1 = -1$ (b) $\frac{x}{2} + 5 = 7$ (c) $3x - 1 = -1$ (d) $3x - 1 = 1$

Q.5 x exceeds 3 by 7, can be represented as

- (a) $x + 3 = 2$ (b) $x + 7 = 3$ (c) $x - 3 = 7$ (d) $x - 7 = 3$

Q.6 The equation having 5 as a solution is:

- (a) $4x + 1 = 2$ (b) $3 - x = 8$ (c) $x - 5 = 3$ (d) $3 + x = 8$

Q.7 The equation having -3 as a solution is:

- (a) $x + 3 = 1$ (b) $8 + 2x = 3$ (c) $10 + 3x = 1$ (d) $2x + 1 = 3$

Q.8 If $\frac{1}{6} - x = \frac{1}{6}$, then $x =$ _____.

Q.9 If 10 less than a number is 65, then the number is _____.

Q.10 If a number is increased by 20, it becomes 45. Then the number is _____.

Q.11 If 84 exceeds another number by 12, then the other number is _____.

Q.12 If $x - \frac{7}{8} = \frac{7}{8}$, then $x =$ _____.

Q.13 Convert the following equations in statement form:

(i) $x - 9 = 12$

(ii) $4p = 25$

(iii) $3n + 6 = 12$

(iv) $\frac{x}{4} + 2 = 6$

Q.14 Solve:

(a) $3n + 7 = 34$

(b) $7p - 1 = 20$

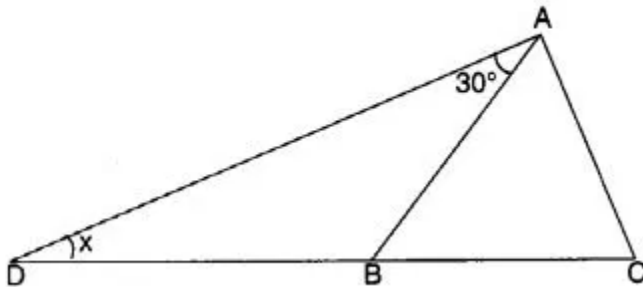
(c) $3(2m + 1) = 18$

(d) $4(x + 3) + 5 = 13$

(e) $5 + 5(p - 2) = 45$

TRIANGLE AND ITS PROPERTIES

Q.1 In the following figure, $\triangle ABC$ is an equilateral triangle. Find $\angle x$.



Q.2 How many medians can a triangle have?

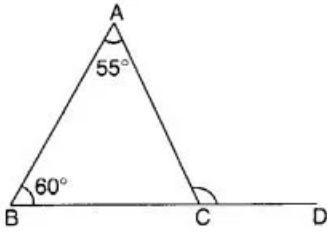
- (a) 1
- (b) 2
- (c) 3
- (d) 4

Q.3 Which of the following statements is true?

- (a) A triangle can have two right angles
- (b) A triangle can have two obtuse angles
- (c) A triangle can have two acute angles
- (d) A triangle can have all the three angles less than 60°

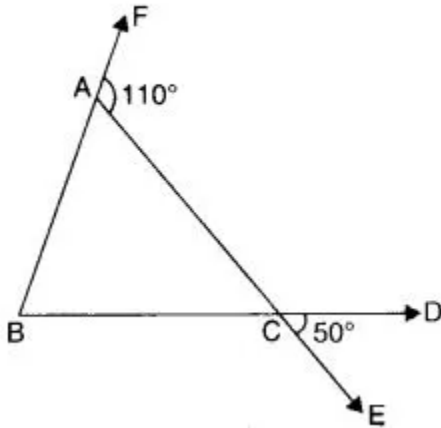
Q.4

In the following figure, the side BC of $\triangle ABC$ is extended up to the point D. If $\angle A = 55^\circ$ and $\angle B = 60^\circ$, then the measure of $\angle ACD$ is



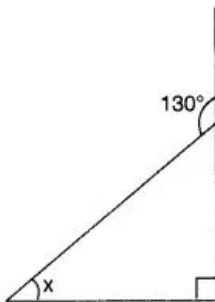
Q.5

In the following figure, find $\angle B$.



Q.6

Find the value of the unknown interior angle x in the following figure:



Q.7

The perpendicular line segment from a vertex of a triangle to its opposite side is called an — of the triangle.

- A. altitude
- B. median
- C. base

Q.8

An ——— angle of a triangle is equal to the sum of its interior opposite angles.

- A. Exterior angle
- B. Interior angle
- C. Adjacent angle

Q.9 In a right-angled triangle, the angles other than the right angle are

- (a) obtuse (b) right (c) acute (d) straight

Q.10 In $\triangle ABC$, AD is the bisector of $\angle A$ meeting BC at D , $CF \perp AB$ and E is the mid-point of AC . Then median of the triangle is

- (a) AD (b) BE
(c) FC (d) DE

DATA HANDLING

Q.1. Fill in the blanks:

A. The difference between the highest and the lowest observation is known as —

B. The ——— of a set of observations is the observation that occurs most often.

C. ——— refers to the value which lies in the middle of the data when arranged in an increasing or decreasing order.

Q.2. Find the range of the following set of data.

- a) 9, 3, 8, 2, 6, 1
b) 12.5, 3.6, 8.5, 7.5, 1.4

Q.3. Manu recorded the temperature (in degrees) of different cities as follows:
28, 29, 20, 25, 27, 40, 38, 43, 18.

Find the mean of the data.

Q.4. What is the average of all prime numbers between 30 to 50?

Q.5. If the mean of two numbers is 24 and one number is 16 find the other number?

Q.6. A dice is thrown randomly, what is the probability of getting:

- a) a composite number
b) a multiple of 3

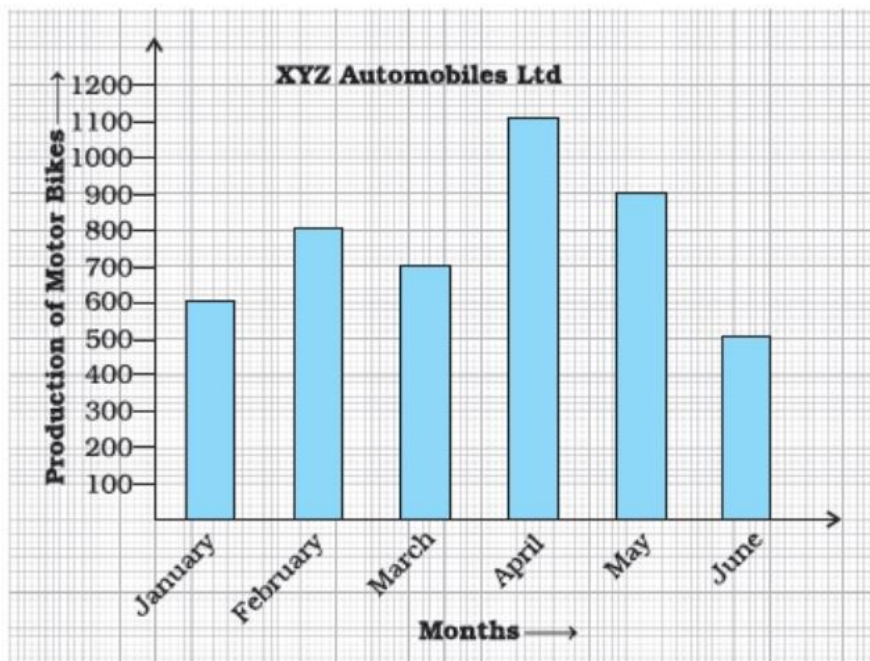
Q.7. Some integers are written on a white board. What is the range of these integers?

0	15
-11	-17
6	+20
	-4

Q.9 If the arithmetic mean of 8,4, x,6,2,7 is 5 then find the value of x.

Q.10.

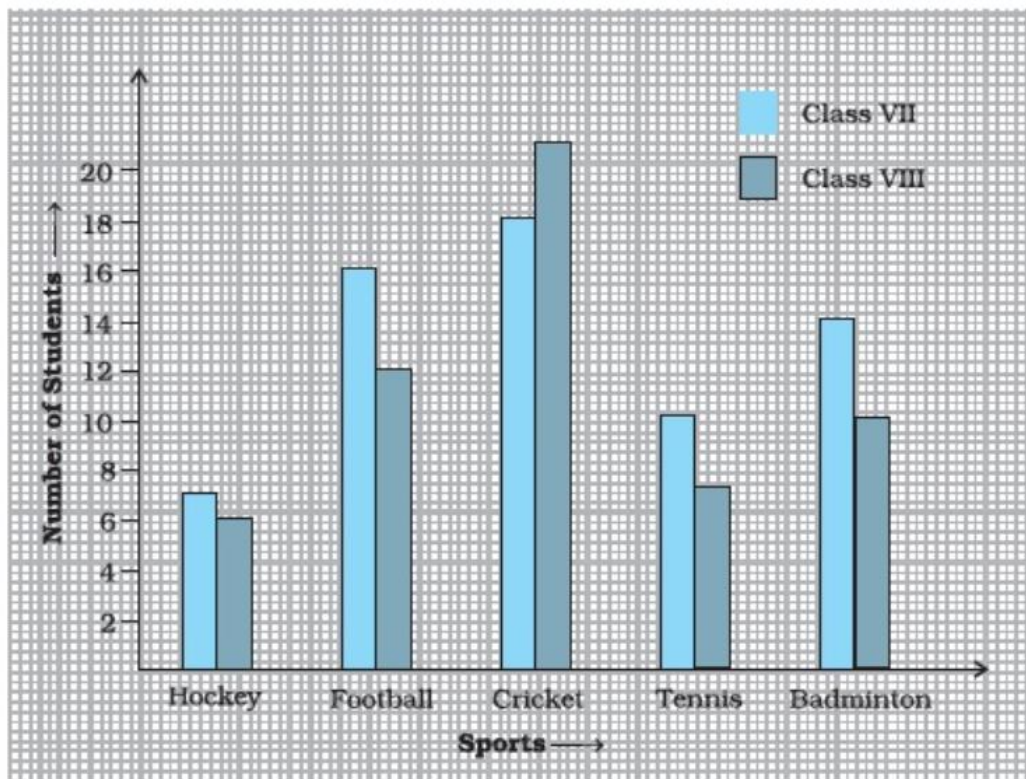
Observe the given bar graph carefully and answer the questions that follow.



- What information does the bar graph depict?
- How many motor bikes were produced in the first three months?
- Calculate the increase in production in May over the production in January.
- In which month the production was minimum and what was it?
- Calculate the average (mean) production of bikes in 6 months.

Q.11.

Study the double bar graphs given below and answer the following questions:



- Which sport is liked the most by Class VIII students?
- How many students of Class VII like Hockey and Tennis in all?
- How many students are there in Class VII?
- For which sport is the number of students of Class VII less than that of Class VIII?
- For how many sports students of Class VIII are less than Class VII?

Q.12.

In a public library, the following observations were recorded by the librarian in a particular week:

Days	Mon	Tues	Wed	Thurs	Fri	Sat
Newspaper Readers	400	600	350	550	500	350
Magazine Readers	150	100	200	300	250	200

- Draw a double bar graph choosing an appropriate scale.
- On which day, the number of readers in the library was maximum?
- What is the mean number of magazine readers?

Q.13.

The students of Class VII have to choose one club from Music, Dance, Yoga, Dramatics, Fine arts and Electronics clubs. The data given below shows the choices made by girls and boys of the class. Study the table and answer the questions that follow:

Clubs	Music	Dance	Yoga	Dramatics	Fine Arts	Electronics
Girls	15	24	10	19	27	21
Boys	12	16	8	17	11	30

- Draw a double bar graph using appropriate scale to depict the above data.
- How many students are there in Class VII?
- Which is the most preferred club by boys?
- Which is the least preferred club by girls?
- For which club the difference between boys and girls is the least?
- For which club is the difference between boys and girls the maximum?