

MCQ WORKSHEET-I
CLASS VIII: CHAPTER - 1
RATIONAL NUMBERS

1. Associative property is not followed in _____.
 (a) whole numbers (b) integers (c) natural numbers (d) rational numbers
2. _____ is the identity for the addition of rational numbers.
 (a) 1 (b) 0 (c) - 1 (d) $\frac{1}{2}$
3. _____ is the multiplicative identity for rational numbers.
 (a) 1 (b) 0 (c) - 1 (d) $\frac{1}{2}$
4. The additive inverse of $\frac{7}{5}$ is
 (a) 1 (b) 0 (c) $-\frac{7}{5}$ (d) $\frac{7}{5}$
5. Zero has _____ reciprocal.
 (a) 1 (b) 2 (c) 3 (d) no
6. The numbers _____ and _____ are their own reciprocals
 (a) 1 and 0 (b) 1 and -1 (c) -1 and 0 (d) none of these.
7. The reciprocal of - 5 is _____.
 (a) 5 (b) 1 (c) $-\frac{1}{5}$ (d) $\frac{1}{5}$
8. Reciprocal of $\frac{1}{x}$, where $x \neq 0$ is _____.
 (a) 1 (b) x (c) 0 (d) none of these
9. The product of two rational numbers is always a _____.
 (a) whole numbers (b) integers (c) natural numbers (d) rational numbers
10. Simplify: $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \left(\frac{-14}{9}\right)$
 (a) 1 (b) 0 (c) 2 (d) $\frac{1}{2}$
11. The sum of the rational numbers $\frac{-5}{16}$ and $\frac{7}{12}$ is
 (a) $\frac{-7}{48}$ (b) $\frac{-11}{30}$ (c) $\frac{13}{48}$ (d) $\frac{1}{3}$
12. What number should be added to $\frac{7}{12}$ to get $\frac{4}{15}$?
 (a) $-\frac{19}{60}$ (b) $-\frac{11}{30}$ (c) $\frac{51}{60}$ (d) $\frac{1}{20}$

MCQ WORKSHEET-II
CLASS VIII: CHAPTER - 1
RATIONAL NUMBERS

1. The reciprocal of a positive rational number is _____.
(a) negative (b) positive (c) zero (d) none of these
2. What number should be subtracted from $-\frac{3}{5}$ to get -2 ?
(a) $-\frac{7}{5}$ (b) $-\frac{13}{5}$ (c) $\frac{13}{5}$ (d) $\frac{7}{5}$
3. Which of the rational numbers $\frac{-11}{28}$, $\frac{-5}{7}$, $\frac{9}{-14}$, $\frac{29}{-42}$ is the greatest?
(a) $\frac{-11}{28}$ (b) $\frac{-5}{7}$ (c) $\frac{9}{-14}$ (d) $\frac{29}{-42}$
4. Which of the rational numbers $\frac{-5}{16}$, $\frac{-13}{24}$, $\frac{3}{-4}$, $\frac{7}{-12}$ is the smallest?
(a) $\frac{-5}{16}$ (b) $\frac{-13}{24}$ (c) $\frac{3}{-4}$ (d) $\frac{7}{-12}$
5. Simplify: $\frac{2}{3} + \frac{-4}{5} + \frac{7}{15} + \frac{-11}{20}$
(a) $\frac{-1}{5}$ (b) $\frac{-13}{60}$ (c) $\frac{-4}{15}$ (d) $\frac{-7}{30}$
6. Rational number $\frac{3}{40}$ is equal to:
(a) 0.75 (b) 0.12 (c) 0.012 (d) 0.075
7. A rational number between 3 and 4 is:
(a) $\frac{3}{2}$ (b) $\frac{4}{3}$ (c) $\frac{7}{2}$ (d) $\frac{7}{4}$
8. A rational number between $\frac{3}{5}$ and $\frac{4}{5}$ is:
(a) $\frac{7}{5}$ (b) $\frac{7}{10}$ (c) $\frac{3}{10}$ (d) $\frac{4}{10}$
9. A rational number between $\frac{1}{2}$ and $\frac{3}{4}$ is:
(a) $\frac{2}{5}$ (b) $\frac{5}{8}$ (c) $\frac{4}{3}$ (d) $\frac{1}{4}$
10. The multiplicative inverse of $\frac{3}{40}$ is:
(a) 1 (b) 0 (c) any number (d) none of these

MCQ WORKSHEET-I
CLASS VIII: CHAPTER - 3
UNDERSTANDING QUADRILATERALS

18

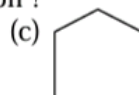
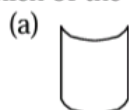
1. A simple closed curve made up of only _____ is called a polygon .
(a) curves (b) line segments (c) lines (d) closed curves
2. A polygon with minimum number of sides is
(a) Pentagon (b) Square (c) triangle (d) angle
3. Polygons that have no portions of their diagonals in their exteriors are called
(a) Squares (b) triangles (c) convex (d) concave
4. Polygons that have any portions of their diagonals in their exteriors are called
(a) Squares (b) triangles (c) convex (d) concave
5. All the sides of a regular polygon are _____.
(a) Parallel (b) equal in length (c) not parallel (d) not equal
6. All the angles of a regular polygon are of _____.
(a) 90° (b) 60° (c) equal measure (d) equal length
7. Sum of all interior angles of a polygon with (n) sides is given by
(a) $(n - 2) \times 180^\circ$ (b) $n - 2 \times 180^\circ$ (c) $(n + 2) \times 180^\circ$ (d) $n + 2 \times 180^\circ$
8. Maximum number of right angles in a right angled triangle are
(a) 2 (b) 1 (c) 3 (d) 0
9. Sum of all interior angles of a parallelogram is
(a) 180° (b) 360° (c) 540° (d) 240°
10. The angle sum of all interior angles of a convex polygon of sides 7 is
(a) 180° (b) 540° (c) 630° (d) 900°
11. Each exterior angle of a regular hexagon is of measure
(a) 120° (b) 80° (c) 100° (d) 60°
12. The number of sides in a regular polygon is 15 , then measure of each exterior angle is
(a) 24° (b) 36° (c) 20° (d) 18°
13. How many diagonals does have in a convex quadrilateral?
(a) 2 (b) 1 (c) 3 (d) none of these
14. How many diagonals does have in a regular hexagon?
(a) 2 (b) 1 (c) 3 (d) none of these
15. How many diagonals does have in a triangle?
(a) 2 (b) 1 (c) 0 (d) none of these

MCQ WORKSHEET-II
CLASS VIII: CHAPTER - 3
UNDERSTANDING QUADRILATERALS

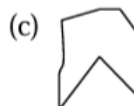
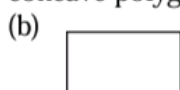
19

1. The measure of each interior angle of a regular polygon is 140° , then number of sides that regular polygon has _____
 (a) 15 (b) 12 (c) 9 (d) 10

2. Which of the following polygons is convex polygon?

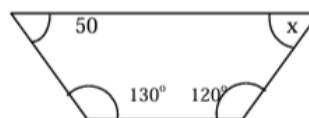


3. Which of the following is concave polygon?



4. The value of x in the following figure is

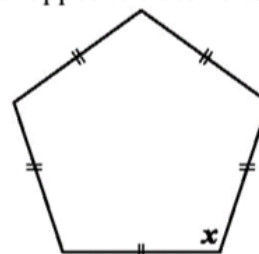
- (a) 120° (b) 80°
 (c) 100° (d) 60°



5. A quadrilateral which has 2 pairs of equal adjacent sides but unequal opposite sides is called _____
 (a) parallelogram (b) rhombus (c) kite (d) square

6. The value of x in the following figure is

- (a) 100° (b) 90°
 (c) 108° (d) 120°



7. The value of x in the following figure is

- (a) 120° (b) 180° (c) 60° (d) 100°



8. A parallelogram each of whose angles measures 90° is _____.
 (a) rectangle (b) rhombus (c) kite (d) trapezium

9. A parallelogram whose all sides are equal is called

- (a) square (b) rhombus (c) rectangle (d) trapezium

10. The diagonals of a rhombus bisect each other at _____ angles.

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

11. Diagonals of a rectangle:

- (a) equal to each other (b) not equal
 (c) one is double of the other (d) none of these

12. The diagonals of a square bisect each other at _____ angle.

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

MCQ WORKSHEET I-IV
CLASS VIII: CHAPTER - 5
DATA HANDLINGS

Cards marked with numbers 1 to 25 are placed in the box and mixed thoroughly. One card is drawn at random from the box. Answer the following questions (Q1-Q10)

1. What is the probability of getting a number 5?
(a) 1 (b) 0 (c) $\frac{1}{25}$ (d) $\frac{1}{5}$
2. What is the probability of getting a number less than 11?
(a) 1 (b) 0 (c) $\frac{1}{5}$ (d) $\frac{2}{5}$
3. What is the probability of getting a number greater than 25?
(a) 1 (b) 0 (c) $\frac{1}{5}$ (d) $\frac{2}{5}$
4. What is the probability of getting a multiple of 5?
(a) 1 (b) 0 (c) $\frac{1}{25}$ (d) $\frac{1}{5}$
5. What is the probability of getting an even number?
(a) 1 (b) 0 (c) $\frac{12}{25}$ (d) $\frac{13}{25}$
6. What is the probability of getting an odd number?
(a) 1 (b) 0 (c) $\frac{12}{25}$ (d) $\frac{13}{25}$
7. What is the probability of getting a prime number?
(a) $\frac{8}{25}$ (b) $\frac{9}{25}$ (c) $\frac{12}{25}$ (d) $\frac{13}{25}$
8. What is the probability of getting a number divisible by 3?
(a) $\frac{8}{25}$ (b) $\frac{9}{25}$ (c) $\frac{12}{25}$ (d) $\frac{13}{25}$
9. What is the probability of getting a number divisible by 4?
(a) $\frac{8}{25}$ (b) $\frac{9}{25}$ (c) $\frac{6}{25}$ (d) $\frac{3}{25}$
10. What is the probability of getting a number divisible by 7?
(a) $\frac{8}{25}$ (b) $\frac{9}{25}$ (c) $\frac{6}{25}$ (d) $\frac{3}{25}$

MCQ WORKSHEET-I
CLASS VIII: CHAPTER - 6
SQUARES AND SQUARE ROOTS

1. Which is the smallest three-digit perfect square?
(a) 100 (b) 101 (c) 121 (d) 144
2. Which is the greatest three-digit perfect square?
(a) 999 (b) 961 (c) 962 (d) 970
3. Which is the greatest 4-digit perfect square?
(a) 9999 (b) 9990 (c) 9800 (d) 9801
4. Which is the smallest 4-digit perfect square?
(a) 1024 (b) 1025 (c) 1000 (d) 1016
5. What will be the number of digits in the square root of 25600?
(a) 3 (b) 2 (c) 5 (d) 4
6. What will be the number of digits in the square root of 1296?
(a) 2 (b) 3 (c) 1 (d) 4
7. The square root of 12.25 is _____.
(a) 3.5 (b) 2.5 (c) 35 (d) 25
8. What is the length of the side of a square whose area is 441 cm^2 ?
(a) 21 (b) 22 (c) 20 (d) 12
9. In a right angle triangle ABC , right angled at B, $AB=6\text{cm}$, $BC=8\text{cm}$,then $AC=$ _____.
(a) 10 (b) 12 (c) 21 (d) 14
10. Which least number should be subtracted from 629 so as to get a perfect square ?
(a) 4 (b) 5 (c) 6 (d) 3
11. The square root of 1.21 is
(a) 1.1 (b) 11 (c) 21 (d) 2.1
12. What is the smallest square number which is divisible by each of the numbers 6,9 and 15 ?
(a) 900 (b) 810 (c) 630 (d) 720
13. The square of 1.2 is
(a) 144 (b) 1.44 (c) 14.4 (d) 2.4
14. The square root of 169 is
(a) -13 (b) 1.3 (c) -1.3 (d) $\frac{13}{10}$
15. What is the length of the diagonal of a rectangle having dimensions 3cm and 4cm?
(a) 5 (b) 7 (c) 1 (d) 4

MCQ WORKSHEET-II
CLASS VIII: CHAPTER - 6
SQUARES AND SQUARE ROOTS

1. What will be the length of third side of a right angled triangle whose hypotenuse is 5cm and one of the side is 3 cm ?
(a) 2 (b) 3 (c) 4 (d) 5
2. Which of the following is not a perfect square ?
(a) 81 (b) 18 (c) 100 (d) 121
3. Which is the smallest square number that is divisible by each of the number 4,9 and 10?
(a) 900 (b) 810 (c) 800 (d) 920
4. Which of the following is not a square number?
(a) 4 (b) 9 (c) 16 (d) 24
5. The square of 23 is :
(a) 529 (b) 526 (c) 46 (d) 429
6. The square of which of the following would be even number?
(a) 2826 (b) 7779 (c) 1057 (d) 131
7. The square of which of the following would be odd number?
(a) 431 (b) 272 (c) 1234 (d) 7928
8. Which of the following is a perfect square ?
(a) 45 (b) 81 (c) 18 (d) 54
9. What will be the "one's digit" in the square of 1234 ?
(a) 6 (b) 2 (c) 8 (d) 9
10. What will be the number of zeros in the square of 400 ?
(a) 5 (b) 1 (c) 3 (d) 4
11. The perfect square number between 30 and 40 is :
(a) 35 (b) 39 (c) 36 (d) 32
12. Which of the following number would have digit 6 at units place ?
(a) 19^2 (b) 24^2 (c) 25^2 (d) 13^2
13. Which of the following number would have digit 5 at units place :
(a) 95^2 (b) 59^2 (c) 24^2 (d) 42^2
14. Which of the following number would have digit 1 at units place ?
(a) 81^2 (b) 18^2 (c) 54^2 (d) 95^2
15. How many natural numbers lie between 9^2 and 10^2 ?
(a) 15 (b) 19 (c) 18 (d) 17

CLASS VIII: CHAPTER - 6
SQUARES AND SQUARE ROOTS

1. How many non square numbers lie between 11^2 and 12^2 ?
(a) 21 (b) 23 (c) 22 (d) 20
2. 25 can be express as the sum of first _____ consecutive odd numbers .
(a) (b) 4 (c) 6 (d) 3
3. How many numbers lie between square of 12 and 13?
(a) 21 (b) 23 (c) 22 (d) 24
4. What will be the value of ' x ' in Pythagorean triplet (6,8, x)?
(a) 5 (b) 7 (c) 10 (d) 11
5. The square of -9 is
(a) -81 (b) 81 (c) 18 (d) -18
6. The square root of 6400 is
(a) 80 (b) 81 (c) 32 (d) 23
7. By which smallest number 90 must be multiplied so as to make it a perfect square ?
(a) 10 (b) 2 (c) 5 (d) 3
8. By which smallest number 48 must be divided so as to make it a perfect square ?
(a) 2 (b) 3 (c) 6 (d) 4
9. Which smallest number should be added to 80 so as to make it a perfect square ?
(a) 2 (b) 3 (c) 1 (d) 4
10. What could be the possible "one's digit" of the square root of 625?
(a) 5 (b) 0 (c) 4 (d) 8
11. The Smallest number by which 12348 must be divided to obtain a perfect square is
(a) 3 (b) 5 (c) 4 (d) 7
12. $\sqrt{0.9} = ?$
(a) 3 (b) 0.3 (c) 0.03 (d) 0.33
13. $\sqrt{1.0816} = ?$
(a) 1.04 (b) 1.286 (c) 0.904 (d) 1.35
14. $\frac{\sqrt{288}}{\sqrt{128}} = ?$
(a) $2\frac{1}{14}$ (b) $2\frac{3}{14}$ (c) $2\frac{5}{14}$ (d) $2\frac{9}{14}$
15. $\sqrt{0.9} \times \sqrt{1.6} = ?$
(a) 0.12 (b) 1.2 (c) 0.75 (d) 12

PRACTICE QUESTIONS
CLASS VIII: CHAPTER - 2
LINEAR EQUATION IN ONE VARIABLE

1. Find the solution of $\frac{3x+5}{2x+1} = \frac{1}{3}$
2. Find the solution of $\frac{x+6}{4} + \frac{x-3}{5} = \frac{5x-4}{8}$
3. Solve: $\frac{x}{4} + \frac{x}{6} = x-7$
4. Solve: $\frac{2}{3}x + 1 = \frac{7}{3}$
5. Solve: $\frac{x}{3} + \frac{5}{2} = \frac{-3}{2}$
6. Solve: $\frac{15}{4} - 7x = 9$
7. Solve: $x = \frac{4}{5}(x+10)$
8. Solve: $\frac{2x}{3} + 1 = \frac{7x}{15} + 3$
9. Solve: $2y + \frac{5}{3} = \frac{26}{3} - y$
10. Solve: $3m - 5m - \frac{8}{5}$
11. Solve: $5x + \frac{7}{2} = \frac{3}{2}x - 14$

27. Solve: $\frac{6x+1}{3} + 1 = \frac{x-3}{6}$

28. Solve: $5x - 2(2x - 7) = 2(3x - 1) + \frac{7}{2}$

29. Solve: $\frac{3x-2}{4} - \frac{2x+3}{3} = \frac{2}{3} - x$

30. Solve: $\frac{3x+2}{7} + \frac{4(x+1)}{5} = \frac{2}{3}(2x+1)$

31. Solve: $x - \frac{x-1}{2} = 1 - \frac{x-2}{3}$

32. Solve: $\frac{x}{2} - \frac{3x}{4} + \frac{5x}{6} = 21$

33. Solve: $x + 7 - \frac{8x}{3} = \frac{17}{6} - \frac{5x}{2}$

34. Solve: $\frac{3x+4}{2-6x} = \frac{-2}{5}$

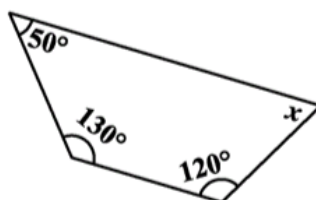
35. Solve: $\frac{7x+4}{x+2} = \frac{-4}{3}$

PRACTICE QUESTIONS

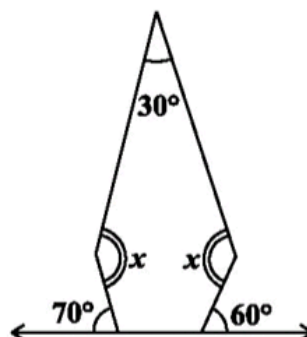
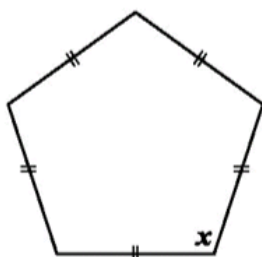
CLASS VIII: CHAPTER - 3

UNDERSTANDING QUADRILATERALS

- How many diagonals does each of the following have?
(a) A convex quadrilateral (b) A regular hexagon (c) A triangle
- What is the sum of the measures of the angles of a convex quadrilateral? Will this property hold if the quadrilateral is not convex? (Make a non-convex quadrilateral and try!)
- What is a regular polygon? State the name of a regular polygon of (i) 3 sides (ii) 4 sides (iii) 6 sides
- Find the angle measure x in the figures.

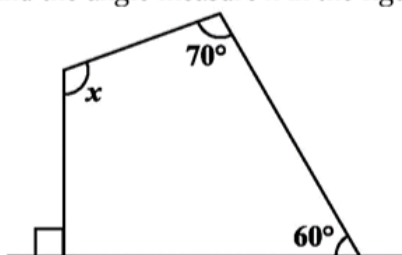


- Find the angle measure x in the figures.



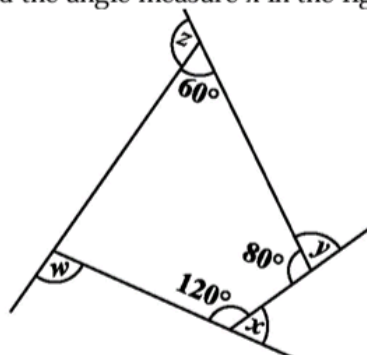
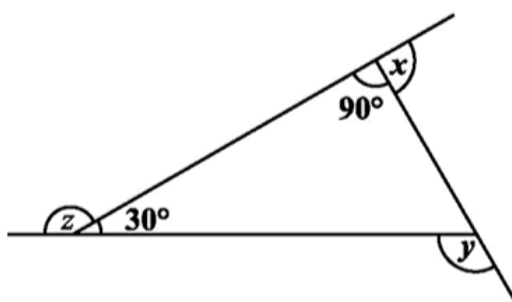
- Find the angle measure x in the figures.

- Find the angle measure x in the figures.

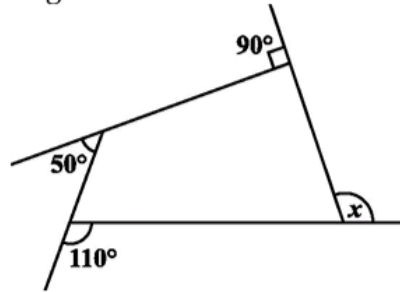


- Find the angle measure x in the figures.

- Find the angle measure x in the figures.



10. Find the angle measure x in the figure:



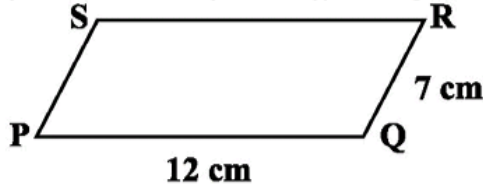
11. Find the number of sides of a regular polygon whose each exterior angle has a measure of 45° .

12. Find the measure of each exterior angle of a regular polygon of (i) 9 sides (ii) 15 sides

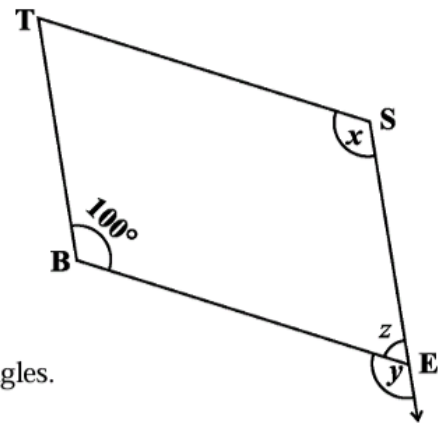
13. How many sides does a regular polygon have if the measure of an exterior angle is 24° ?

14. How many sides does a regular polygon have if each of its interior angles is 165° ?

15. Find the perimeter of the parallelogram PQRS

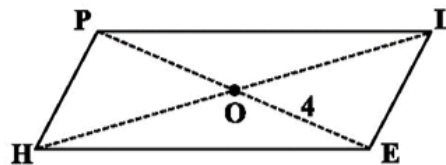


16. In Fig, BEST is a parallelogram. Find the values x , y and z .

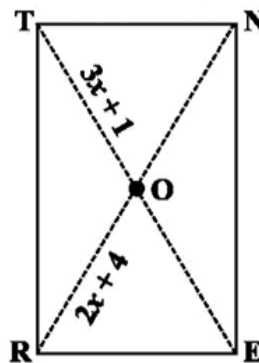


17. In a parallelogram RING, if $m\angle R = 70^\circ$, find all the other angles.

18. In Fig HELP is a parallelogram. (Lengths are in cms). Given that $OE = 4$ and HL is 5 more than PE ? Find OH .



19. RENT is a rectangle. Its diagonals meet at O. Find x , if $OR = 2x + 4$ and $OT = 3x + 1$.



20. Find the number of sides of a regular polygon whose each exterior angle has a measure of 15° .

PRACTICE QUESTIONS
CLASS VIII: CHAPTER - 6
SQUARES AND SQUARE ROOTS

1. Find the perfect square numbers between (i) 30 and 40 (ii) 50 and 60
2. Which of 123^2 , 77^2 , 82^2 , 161^2 , 109^2 would end with digit 1?
3. Which of the following numbers would have digit 6 at unit place.
(i) 19^2 (ii) 24^2 (iii) 26^2 (iv) 36^2 (v) 34^2
4. What will be the "one's digit" in the square of the following numbers?
(i) 1234 (ii) 26387 (iii) 52698 (iv) 99880 (v) 21222 (vi) 9106
5. The square of which of the following numbers would be an odd number/an even number? Why?
(i) 727 (ii) 158 (iii) 269 (iv) 1980
6. What will be the number of zeros in the square of the following numbers?
(i) 60 (ii) 400
7. How many natural numbers lie between 9^2 and 10^2 ? Between 11^2 and 12^2 ?
8. How many non square numbers lie between the following pairs of numbers
(i) 100^2 and 101^2 (ii) 90^2 and 91^2 (iii) 1000^2 and 1001^2
9. Find whether each of the following numbers is a perfect square or not?
(i) 121 (ii) 55 (iii) 81 (iv) 49 (v) 69
10. Express the following as the sum of two consecutive integers.
(i) 21^2 (ii) 13^2 (iii) 11^2 (iv) 19^2
11. (i) Express 49 as the sum of 7 odd numbers.
(ii) Express 121 as the sum of 11 odd numbers.
12. How many numbers lie between squares of the following numbers?
(i) 12 and 13 (ii) 25 and 26 (iii) 99 and 100
13. Find the square of the following numbers without actual multiplication.
(i) 39 (ii) 42
14. Find the squares of the following numbers containing 5 in unit's place.
(i) 15 (ii) 95 (iii) 105 (iv) 205
15. Write a Pythagorean triplet whose smallest member is 8.
16. Find a Pythagorean triplet in which one member is 12.
17. Write a Pythagorean triplet whose one member is.
(i) 6 (ii) 14 (iii) 16 (iv) 18
18. By repeated subtraction of odd numbers starting from 1, find whether the following numbers are perfect squares or not? If the number is a perfect square then find its square root.
(i) 121 (ii) 55 (iii) 36 (iv) 49 (v) 90