1. Find perimeter of rectangle whose length =6m8dm and breadth =4m6dm

2. Find the cost of fencing rectangle field 24n long and 18m wide at Rs. 6.25 per meter.

3. The length and breadth of rectangle field are in ratio 5:3. If its perimeter is 64m. Find the dimensions.

4. The cost of fencing a rectangle field at Rs. 14.60 per m is 1606. If the width of the field is 23m find its length.

5. The length and breadth of rectangle field are in ratio 3:2. The cost of fencing the field at Rs. 6.50 per m is Rs. 520. Find the dimensions of the field.

6. The cost of putting fence around a square field at Rs. 15 per m is Rs. 432. Find the length of each side of the field.

7. Each side of square is of 21m. Adjacent to this field, there is a rectangular field having its side in ratio4:3. If perimeters of both fields are equal find the dimensions of the rectangular field.

8.Find the circumference of circle if r =14cm

9. Find the diameter of circle if circumference is 66 cm

10. Find the diameter of circle if circumference is 75 $\frac{3}{7}$ cm

11. The diameter of wheel of a car is 70 cm. Find the distance travel by wheel of car in 1000 revolutions.

12. Find the circumference of circle if diameter of circle is 10m.

13. The diameter of wheel of a car is 70 cm. How many revolutions will it take to make to travel 1.65 km.

14. The diameter of wheel of a car is 70 cm. Find the distance travel by wheel of car in 50 revolutions.

15. Find the diameter of circle if circumference is 88 cm.

16. The diameter of wheel of a car is 77cm. How many revolutions will it take to make to travel 1210m km.

17. Find the radius of circle if circumference is 66cm

18. Find the area of a rectangle whose length and breadth 45cm and 16cm respectively. Also find perimeter of rectangle

19. A room is 5m 40cm long and 3m 75cm wide. Find the area of the carpet needed to cover the floor.

6th Area and Perimeter -2

1. A room is 9.68m long and 6.3m wide. Its floor is to be covered with rectangular tiles of size 22cm by 10cm. Find the total cost of the tiles at Rs. 5 per tiles.

2. The area of rectangle is 650 sq cm and one of its side is 13cm. Find the perimeter of rectangle.

3. The total cost of flooring a room at Rs. 8.50 per sq metre is Rs. 510. If the length of the room is 8m. Find its breadth.

4. Find perimeter of square field whose side is 6.3m

5. The top of the table measure 2m 25 cm by 1m 20 cm .Find its area in square metre.

6. How many envelop can be made from a sheet of paper 324cm by 172cm. If envelop require a piece of paper of size 18cm by 12cm.

7. A room is 12.5m by 8m .A square carpet of side 8m is laid on the floor .Find the area of carpet that is not carpeted.

8. (i) How many sq.cm in a square meter.(ii) What is the difference between 3 square meter and 3 meter square

9. A lane, 150m by 9m is paved with bricks of length 22.5cm and breadth 7.5cm. Find the number of bricks required.

10. A room is 13m long and 9m broad. Find the cost of carpeting the room with a carpet 75cm broad at the rate of Rs. 6.50 per metre.

11. The length and breadth of rectangular park are in ratio 5:3 and its perimeter is 128 m. find the area of the park.

12. Two plots have same perimeter. One is a square of side 64m and other is rectangle of length 70m and breadth 58m which field has greater area and by how much.

13. Find the cost of cultivating a rectangular field at Rs. 1.50 per sq metre is Rs. 1833. If breadth of field is 26 m . Find the cost of fencing at Rs. 7.50 per metre.

14. The length and breadth of a play ground are 62m60cm and 25m40cm respectively. Find the cost of turfing at Rs. 2.50 per square meter .How long man take to go three times around the field if he walks at the rate of 2 metre per second.

15. Find the cost of cultivating a rectangular field 34m long and 18m wide at Rs. 4.50 per sq metre.   Also find the cost of fencing the field at Rs. 2.25 per metre.

1. Find the ratio of

(i)40 paisa to Rs 4 (II) 24 min. to an hr (III) 125 ml to 2 litres (IV) 4m to 36 cm (V) Dozen to Score

2. Find the ratio the price of coffee to that of tea, when coffee cost rupees 24 per100 gm and tea Rs 80

per kg?

3. Two numbers are in ratio 2:7. If the sum of the numbers are 81. Find the numbers?

4. Divide the number 642 in ratio 1: 2: 3 among A, B, C

5. The ratio of Length and breadth of rectangle is 5:3. Find l and b if perimeter is 256?

6. Which ratio is larger (I) 5:12 or 17:30   (ii) 2:3 or 16:24

7. A bus travel 126 km in 3hrs.and a train travel 315 km in 5 hrs. Find ratio of their speed?

8. Are (I) 7,42,13,78 in proportional? (ii) Find x if 48, 36, x are in proportional?

9. First, second, fourth term of a proportional are 45, 25, 35, Find third term.

10. If 36 , x , x , 16 are in proportional Find value of x

11. Find value of x if 25, 35, x   are in proportional

12. An electrical pole cast shadow length 20 m at a time when a tree of 6 cm cast shadow of 8 m. Find

the height of pole.

13. The length of the sides of a triangle is in ratios 1: 3: 5 .If perimeter of triangle is 90 cm find its largest

side.

14. Rohit earns Rs. 7650 and saves Rs. 918 per month Find ratio of

(I) his income to his saving (II) His income to his expenditure (III) his expenditure to his saving

15. Find the ratio of the price of pencil to that of ball pen if pencil cost Rs 96 per score and ball pen cost

Rs. 50.40 per dozen.

16. The ratio of the height of Mohit and Rohit is 4: 3 if Rohit is 1.5 m tall. Find the height of Mohit?

17. Neha got 850 marks out of 1000 marks and Suzie got 375 in 500. Express their marks in ratio?

18. The ratio of income to expenditure 9: 8 Find saving, if total income is Rs. 2700

19. Jaya is 1.30m tall and Shakshi is 1m25 cm tall. Find the ratio of their height

20. First, third, fourth term of a proportional are 45, 25, 35, Find third term.

21. If 36 , x , x , 16 are in proportional Find value of x

22. Find value of x if 25, 35, x   are in proportional

23. An electrical pole cast shadow length 20 m at a time when a tree of 6 cm cast shadow of 8 m. Find the height of pole.

24. The length of the sides of a triangle are in ratio 1: 3: 5 .If perimeter of triangle is 90 cm find its largest side

25. Rohit earns Rs. 7650 and saves Rs. 918 per month Find ratio of

(I) his income to his saving (II) His income to his expenditure (III) his expenditure to his saving

 26. Find the ratio of the price of pencil to that of ball pen if pencil cost Rs 96 per score and ball pen cost Rs. 50.40 per dozen

27. (i)Find the ratio of 75 paisa and Rs 3 (i)Find the ratio of 125 gm to 2 kg. ?

28. Neha got 850 marks out of 1000 marks and Sazia got 375 in 500.Express their marks in ratio?

29. The number of boys in school is 500 and that of girls 275. Find the Ratio of

     (i) Boys to that of girls (ii) Boys to total num of students   (iii) Total number to that of girls.

30. The ratio of the height of Mohit and Rohit is 4 : 3 . if Rihit is 1.5 m tall . Find the height of Mohit 31. Jaya is 1.30m tall and Shakshi is 1m25 cm tall . Find the ratio of their height ?

32 Are 5 : 6 : : 10 : 12 and 12 : 18 : : 14 : 24 equivalent ?

33. Find the value of x : (i)   X/5 = 6/15 (ii) 7/8 = 21 /X   (iii) 44 : X : : 11 : 4 (iv) 7 : X = 21 : X

34. The ratio of income to expenditure 9 : 8 Find saving, if total income is Rs. 2700

35. Two number are in ratio 2 : 7 . If the sum of the num is 81 .Find the numbers?

36. The ratio of boys to girls in a school is 8 : 3 if the num. of boys are 400 find the number of girls.

38. Is 3: 5 equivalents to 4: 6? Why or why not?

39. The 1st 2nd and 4th term of a proportion al is 6, 10, 15 . Find the third term?

40. First, third, fourth term of a proportional are 45,25,35, Find third term.

41. If 36, x, x , 16 are in proportional Find value of x

42. Find value of x if 25, 35, x   are in proportional

43. An electrical pole cast shadow length 20 m at a time when a tree of 6 cm cast shadow of 8 m. Find the height of pole.

44. The length of the side of a triangle are in ratio 1: 3 : 5 .If perimeter of triangle is 90 cm find its largest side.

45. Rohit earns Rs. 7650 and saves Rs. 918 per month Find ratio of

(I) his income to his saving (II) His income to his expenditure (III) his expenditure to his saving

 46. Find the ratio of the price of pencil to that of ball pen if pencil cost Rs 96 per score and ball pen cost Rs. 50.40 per dozen.

1. A truck runs 495 km on 36 liter petrol. How many km can it run on 35 liter petrol?

2.12 men can reap a field in 25 days. In how many days can 20 men reap field?

3. In a camp, there were provisions for 425 men for 30 days. However, 375 men attend the camp. How many provision last?

4. If 48 boxes are needed for 6000 pens. How many boxes will be needed for 1875 pens?

5. A bus travel 36 km in $\frac{2}{3}$hr. If it maintains a uniform speed, how long will it takes to cover162 km? How for does it travel in 8 hrs. ?

6.25 bags each weighting 40 kg, cost Rs 2750. Find the cost of 35 bags of wheat if each weighting 50 kg?

7. 24 workers can build a wall in 15 days. How many days will 9 workers take to build a similar wall?

8. 12 men can repair a road in 28 days. how long will 84 men take to do so?

9. 8 taps having the same rate of flow, fill a tank in 27minutes. If two taps go out of order, how long will the remaining taps take to fill the tank?

10. 15pumps can empty a reservoir in 24hours. In how many hours can 45such pumps do the same work?

11. A car can finish a certain journey in 9 hrs. The speed of 72km/h. By how much should its speed be increased so that it may take only 8hto cover the same distance?

12. A garrison of 500 men had provision for 24days. However a reinforcement of 300men arrived. Now for how many days the food will last?

13. 4.5g of alloy of copper and zinc contains 3.5g of copper. What weight of copper will be there in 18.9g of alloy?

14. 12 worker reap a field in 25 days. In how many days can 20 men reap field?

15. A train covers a distance of 399km in 6hrs. How much distance will covered in 16hrs? Also find time taken by train to cover 1330km?

1. Write each in product form:-   (a) $4a^3$ (b) $10x^3y^3z^2$ (c) $7p^2q^2$

2. Write in exponential form:-

(a) $17 \times b \times b \times c \times c \times c$ (b) $13 \times p \times q \times q \times q \times r \times r$ c) $7 \times a \times a \times a \times a$ - - - - - - - - 17 times

3. Add: -   (a) $17x2 + 2y^2 + 3xy$, $-9x^2 + 11y^2 - 3xy$ and $12x^2 - 7y^2 + 6xy$

       (b) $-a^2 + b^2 - 2abc$, $-3a^2 - 2b^2 + 4abc$ and $4a^2 + 3b^2 - 4abc$

4. Subtract

(a) $6x^2 - 6y^2 + 7xy$ from 0 (b) $7x - 3y$ from $7x + 3y$ (c) $-6x^2 + 7y^2 + 2xy$ from $6x^2 - 7y^2 - 3xy$

5. Identify the like terms in x^2y^3z; xyz; $-y^3zx^2$; $-2xyz$

6. If A$= - 2l +6m - 3p$; B $= l- m + 2p$ then find $2 B - 3 A$

7. Subtract (i) $7x + 2y -7z$ from -1 (ii) $-2a+b+6d$ from $5a - 2 - 3c$

8. From the sum of $3x^2-5x +2$ and $- 5 x^2 - 8 x +6$ subtract $4x^2 - 9x +7$

9. Subtract the sum of $3l +2m - p$; $2l - 4m + p$; $- 6l + m$ from 0

10. From the sum of $- a + b - 3c$; $2a + b - c$; $1a - 4b + 5c$; $2a - 6b +c$ subtract $- a - b- c$

11. Simplify the expressions (i) $3y (2y - 7) - 3 (y - 4) -63$ (ii) $5y (3y^2 + 5y- 11) + 3 (y^3 - 4y^2 + 6)$

12. Add the following.

(i) $a b - b c$, $b c - ca$, $ca - a b$ (ii) $a - b + a b$, $b - c + bc$, $c - a + ac$

13. Simplify

(i) $(2x^3-3x^2+7x-8) + (-5x^3+2x^2-4x+1)+ (3-6x+5x^2-x^3)$ (ii) $2p^3 -3p^2 +4p-5-6p^3+2p^2 -8p-2+6p+8$

14. How much does 1 exceed $2x - 3y - 4$?

15. How much less than $x - 2y +3z$ is $2x - 4y - z$

16. What must be subtracted from $a^3 - 2x^2 + 5a - 6$ to obtain $a^2 - 2a + 1$?

17. Simplify $2P^3 - 3p^2 + 4p - 5 - 6P^3 + 2p^2 + 8p - 2 + 6p+8$

18. Subtract $x^3 +2x^2y+6xy^2-y^3$ from $y^3 - 3xy^2 -4xy^2$

19. How much is $a+2b-3c$ greater than $2a-3b+c$

20. $2a - [4b - \{ 4a - (3b- \overline{2a + 2b})\}]$

21. $5a - [a^2 - \{ 2a (1 - a + 4a^2) - 3a (a^2 - 5a -3)\}] - 8a$

22. $- x + [5y - \{ x - (5y - 2x)\}]$

23. $2a - [3b - \{a - (2c - 3b) + 4c - (a - b - 2c)\}]$

24. $- 3 (a +b) + 4 (2a - 3b) - (2a - b)$

25. $- a - [a + \{ a + b - 2a - (a - 2b \} - b]$

1. The present age of Sahil's mother is three times the present age of Sahil. .After 5 years their ages will add to 66 years. Find their present ages.

2. Bansi has 3 times as many two-rupee coins as he has five-rupee coins. If he has in all a sum of Rs 77, how many coins of each denomination does he have?

3. The difference between two whole numbers is 66. The ratio of the two numbers is 2 : 5. What are the two numbers?

4. Aman's age is three times his son's age. Ten years ago he was five times his son'sage. Find their present ages.

5. Write statement as equation

(i) 25 exceeds a number by 7   (ii) 3 less than 4 times a number is 17

(iii) 5 subtracted from thrice a number is 16   (iv) twice a number subtracted from 19 is 11

6. Solve hit and trial (i)11 + x 19   (ii) $\frac{1}{2} x + 7 = 11$ (iii)2x + 4=3y   (iv) z -3 = 2z -5

7. Solve and check (i) $\frac{2m}{3} + 8 = \frac{m}{2} - 1$ (ii) $\frac{3}{4} (x - 1) = x - 3$ (iii) 3(x+6) +2(x + 3) = 64

8. If a number id tripled and result is increased by 5 we get 50. Find number?

9. Mrs.Goel is 27 yrs older than her daughter Rekha. After 8 yrs she will be twice as old as Rekha. Find their ages?

10 Find the two numbers such that one of them is five time other and difference is 132?

11. Five times the price of a pen is Rs. 17 more than thrice its price. Find price of pen?

12. A man is 24 years older than his son. In two years, his age will be twice the age of his son. Find the present age of his son?

13. A number when added to its half gives 72. Find the number?

14. Find 3 consecutive natural numbers whose sum is 45.

15. When the smaller of two consecutive integers is added to three time the larger integer the result is 43. Find both the numbers.

16. If 2 is subtracted from a number, then tripled, the result is 4 more than the given number. Find the number.

17. The age of father is 30 years more than that of his son. 5 years hence father's age will be thrice of his son's age, find their present ages.

18. After 12 years. Manoj will be 3 times as old as he was 4 yrs. ago. What is his present age?

19. The age of Nishant and Sanjay are in the ratio 4 : 5.Ten years hence the ratio of their ages will be 6 : 7. Find their present ages

20. A bag contains 25-p coins and 50-p coins of Rs.30. If number of 25-p coins is four times 50-p coins find the number of each type of coins.   jsuniltutorial.weebly.com