

**REVISION WORKSHEET**  
**TERM END EXAMINATION 2, 2019-20**

NAME: .....  
CLASS :VIII

DATE :  
SUBJECT:MATHEMATICS

- The common factor of  $15x^2y^2, -3xy^3, 9xy$  is \_\_\_\_\_.  
(a)  $9xy$  (b)  $-9xy$  (c)  $3xy$  (d)  $-3xy$
- Write the trinomial whose factors are  $(x+1)$  and  $(x+2)$ .
- Multiply the binomials :-  $(2x+5)$  and  $(4x-3)$
- Find the volume of the rectangular box whose length =  $mn$ , breadth =  $m^2p$ , depth  $(d) = pm$ .
- Coefficient of term  $xy^2$  in expression  $2xy^2 + x^3 - x^5 + xy^2$  is \_\_\_\_\_.
- The area of a rectangle with length  $4ab$  and breadth  $6b^2$  is \_\_\_\_\_.
- The factors of  $3a^2 - 108b$   
(a)  $(3a-12b)(3a+9b)$  (b)  $3(a-6b)(a+6b)$  (c)  $(3a-24b)(a+6b)$  (d)  $3(a-6b)(a+4b)$
- Find the quotient we get on dividing  $57p^2qr$  by  $114pq$ .
- The value of  $(a+b)^2 + (a-b)^2$  is \_\_\_\_\_.  
(a)  $2a+2b$  (b)  $2a-2b$  (c)  $2a^2 + 2b^2$  (d)  $2a^2 - 2b^2$
- Expand the following using suitable identities:  
(i)  $(\frac{4}{5}a + \frac{5}{4}b)^2$  (ii)  $(2x+9)(2x-9)$  (iii)  $(x-5y)(x-5y)$
- Using suitable identities, evaluate the following:  
(i)  $(104)^2$  (ii)  $(95)^2$  (iii)  $98 \times 102$
- Factorise the following expressions:  
(i)  $3pqr - 6p^2q^2r - 15r^2$  (ii)  $x^2 + 14x + 49$  (iii)  $16x^2 + 40x + 25$  (iv)  $p^2 - 13p - 30$  (v)  $x^2 + 15x + 26$   
(vi)  $p^2 - 13p - 30$  (vii)  $4x^2 - 25y^2$  (viii)  $\frac{x^2}{9} - \frac{y^2}{25}$  (ix)  $2x^2 - 35x - 18$ .
- The area of a rectangle is given by  $x^2 + 19x - 20$ . Find the possible length and breadth of the rectangle.
- The area of a rectangle is  $x^2 + 7x + 12$ . If its length is  $(x+3)$ , find its breadth.
- The cost of a chocolate is  $(x+y)$  and Rohit bought  $(x+y)$  chocolates. Find the total amount paid by him in terms of  $x$ .
- If  $x-y=13$  and  $xy=28$ , then find  $x^2+y^2$ .

17. Find the value of a if  $9a = (76)^2 - (67)^2$

18. Using long division method, find the quotient.  $(6x^2 + 5x - 4) \div (2x - 1)$ .

19. If 12 pumps can empty a reservoir in 20 hours, how much time is required by 45 such reservoir to empty the same reservoir?

20. If x and y varies inversely, then find the missing value in the table given:

x	?	60
y	2	10

21. A car is travelling 48km in one hour. What is the distance travelled by the car in 12 minutes.

22. If 45 persons can complete the work in 20 days, how long it will take to complete the work by 75 persons?

23. A contractor undertook a contract to complete a part of a stadium in 9 months with a team of 560 persons. Later on it was required to complete the job in 5 months. How many extra persons should he employ to complete the work on time.

24. A can do piece of work in 3 days, B can do it 6 days. How long will A and B take to complete the work together?

25. A cistern can be filled by a tap in 4 hours and emptied by an outlet pipe in 6 hours. How long will it take to fill the cistern if both taps are opened together?

26. A godown has dimensions 7m x 4.5m x 2m. How many cartons of dimensions 70cm x 22.5cm x 40cm can be stored in it?

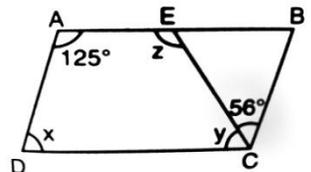
27. A metallic cuboid of dimensions 60cm, 40cm and 20cm is melted and made into cubes of 2cm side. How many such cubes can be obtained?

28. One angle of a parallelogram is  $60^\circ$ . Find all the other angles.

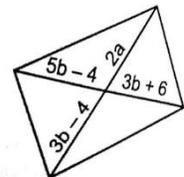
29. One of the diagonals of a rhombus is same in length as one of its sides. Find the angles of the rhombus.

30. The length of a rectangle is 8cm and each of its diagonal measures 10cm. Find its perimeter.

31. ABCD is a parallelogram. Given  $\angle BAD = 125^\circ$  and  $\angle BCE = 56^\circ$ . Find x, y and z.



32. What values of a and b would make the given quadrilateral a parallelogram?



33. The angles of the quadrilateral are in the ratio 2:3:5:8. Find the four angles of the quadrilateral.

34. How many diagonals does a regular octagon have?

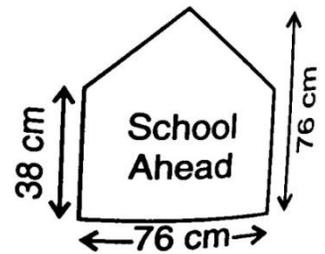
35. How many number of sides does a regular polygon have if each of its exterior angles measures  $45^\circ$ ?

36. A field is in the form of a trapezium whose parallel sides are 40m and 22m and perpendicular distance between them is 12m. Find the cost of watering the field at the rate of Rs.5 per  $m^2$ .

37. A sign board has dimensions as shown in the figure.

(a) What is the area of the sign board?

(b) If 4 such sign boards are cut from the rectangular metal sheet 350cm long and 320cm wide, what will be the area of the metal left over?



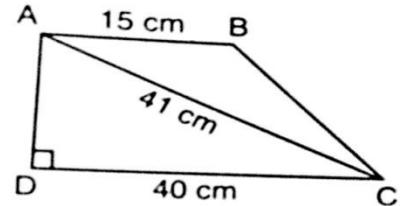
38. Find the area of a rhombus whose diagonals are 18cm and 12cm.

39. Two parallel sides of a trapezium are 85cm and 63cm and its area is  $2664\text{cm}^2$ . Find its altitude.

40. In which quadrant will (x,y) be graphed if ,

- a)  $x > 0$  and  $y > 0$  (b)  $x < 0$  and  $y < 0$  (c)  $x < 0$  and  $y > 0$

41. In the figure given below AB and DC are parallel sides of a trapezium ABCD and  $\angle ADC = 90^\circ$ . Given  $AB = 15\text{cm}$ ,  $CD = 40\text{cm}$  and diagonal  $AC = 41\text{cm}$ . Calculate the area of trapezium ABCD.

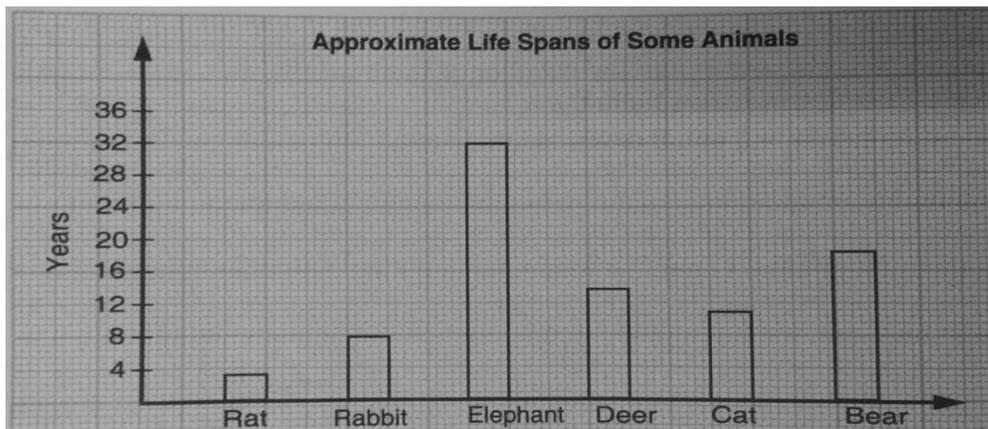


42. The monthly sale of computers by a shopkeeper is as shown in the following table.

Months	July	Aug.	Sept.	Oct.	Nov.
Number of Computers sold	12	18	28	42	44

Draw a pie chart to represent the data.

43. Given below is the bar graph showing the approximate life span of some animals. Read the bar graph and answer the questions that follow:



i) How many years does 1 unit length represent?

ii) What is the ratio of the life span of rabbit to life span of the elephants?

iii) The elephant's life span is how many years longer than the deer's?

44. The blood groups of 30 students of Class VIII are recorded as follows:

A, B, O, O, AB, O, A, O, B, A, O, B, A, O, O,  
A, AB, O, A, A, O, O, AB, B, A, O, B, A, B, O.

Represent this data in the form of a frequency distribution table. Which is the most common, and which is the rarest, blood group among these students?

45. The distributions of weight (in kg) of 100 people are given below. Draw a histogram to represent the given data.

Weight in Kg	40 -45	45 -50	50 -55	55-60	60-65
No. of people	10	25	27	16	10

46. Write in which quadrant you find the points represented by the given ordered pairs:

(i) (3,-5) (ii) (-3,-5) (iii) (3, 5) (iv) (-3, 5)

47. Write the points whose:

(a) abscissa is -3 and ordinate is 4 (b) ordinate is 4 more than -3 and abscissa is 0

48. Nine playing cards are numbered 2 to 10. A card is selected from them at random. Calculate the probability that the card will be:

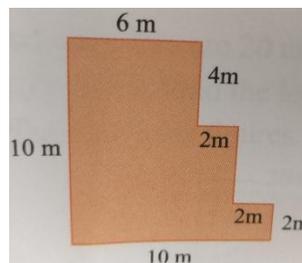
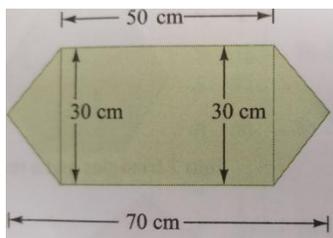
- (i) an odd number
- (ii) a two digit number
- (iii) a prime number



49. What are all the possible outcomes when a dice is rolled?

50. What is the probability of getting a head when a coin is flipped?

51. Calculate the area of the given figures:



52. A card is drawn from a well shuffled pack of cards at random. What is the probability of getting

- (i) a red card
- (ii) a face card
- (iii) a 6 of spade