

WINTER BREAK HOLIDAY HOMEWORK 2017-18

MATHS

CLASS - VIII - A, B, C

1. Identify the terms, their co-efficients for each of the following expressions.

i) $3 - pq + qr - rp$ ii) $\frac{x}{2} + \frac{y}{2} - xy$

2. Add: i) $a - b + ab, b - c + bc, c - a + ac$
 ii) $2p^2q^2 - 3pq + 4, 5 + 7pq - 3p^2q^2$

3. Subtract: a) $4a - 7ab + 3b + 12$ from $12a - 9ab + 5b - 3$
 b) $4p^2q - 3pq + 5pq^2 - 8p + 7q - 10$ from
 $18 - 3p - 11q + 5pq - 2pq^2 + 5p^2q$

4. Find the product of

i) $-4p^3, -3p$ ii) $4p \times 0 = \underline{\hspace{2cm}}$

5. Using Euler's formula, Find the unknown

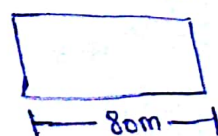
Faces	?	5	20
vertices	6	?	12
Edges	12	9	?

6. Can a polyhedron have 10 faces, 20 edges, and 15 vertices?

7. A polyhedron has 20 faces and 12 vertices, Find the edges of the polyhedron.

8. The side of a square board is 50cm. A student has to draw its image in her notebook. If the drawing of the square board in the notebook has perimeter of 40cm, then by which scale of figure has been drawn.

9. A square and a rectangular field with measurement as given in the figure have the same perimeter. Which field has a larger area?



10. A flooring tile has the shape of a parallelogram whose base is 24cm and the corresponding height is 10cm. How many such tiles are required to cover a floor of area 1080m^2 ?
11. Find the area of a parallelogram whose base is 20cm and the corresponding height 5cm.
12. The area of a trapezium is 34cm^2 and the length of one of the parallel sides is 10cm and its height is 4cm. Find the length of the other parallel side.
13. The diagonals of a rhombus are 7.5cm and 12cm. Find its area.
14. Find the side of a cube whose surface area is 600cm^2
15. Evaluate i) $(-4)^{-2}$ ii) $(\frac{1}{2})^{-5}$
16. Simplify: i) $[2^{-3} \times (-7^3)]$ ii) $(\frac{1}{2^3})^2$
17. Express the following numbers in standard form:
 i) 0.0000000000942 ii) 3186000000
18. Express the following numbers in usual form:
 i) 4.5×10^4 ii) 3.02×10^{-6} iii) 1.0001×10^9
19. Following are the carparking charges near a railway station upto:
 4 hours ₹ 60
 8 hours ₹ 100
 12 hours ₹ 140
 24 hours ₹ 180
 Check if the parking charges are in direct proportion to the parking time.
20. Find the value of m for which
 $5^m \div 5^{-3} = 5^5$