

**BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA.**  
**DECEMBER ASSIGNMENT**  
**CLASS- VIII (MATHEMATICS)**  
**TOPICS: UNDERSTANDING QUADRILATERALS, FACTORISATION & INTRODUCTION TO GRAPHS**

**SECTION – A (MULTIPLE CHOICE QUESTIONS)**

1.	The co-ordinates of any point in IV quadrant are a) (+, +) b) (+, -) c) (-, +) d) (-, -)
2.	In a quadrilateral ABCD, the angles A, B, C and D are in the ratio 1 : 2 : 3 : 4, then the measure of the smallest angle is a) 28° b) 36° c) 72° d) 60°
3.	Assertion (A) – The common factor of $a^2m^4$ and $a^4m^2$ is $a^2m^4$ . Reason (R) – A common factor is a number that can be divided into two different numbers, without leaving a remainder. a) Both A and R are true and R is the correct explanation of A. b) Both A and R are true but R is not the correct explanation of A. c) A is true but R is false. d) A is false but R is true.

**SECTION – B ( 2 MARKS QUESTIONS)**

4.	The measure of one angle of a parallelogram is 75°. What is the measure of other angles?
5.	Factorise: $25(x + y)^2 - 36(x - 2y)^2$ .

**SECTION – C (3 MARKS QUESTIONS)**

6.	The ratio of two sides of a parallelogram is 4 : 3. If its perimeter is 56cm, find the lengths of its sides.
7.	Factorise: $15x^2 - 26x + 8$ .

**SECTION – D (5 MARKS QUESTIONS)**

8.	Draw a linear graph for the simple interest on Rs. 100 at the rate of 5% p.a. for different no. of years.
9.	Factorise and divide: $\frac{(x^2 - 8x + 12)(x^2 - 16)}{(x^2 - 36)(x^2 - 4)}$

**SECTION – E (CASE STUDY)**



10.	<p>During maths lab activity each students was given four broom sticks of length 8cm, 8cm, 5cm, 5cm to make different types of quadrilaterals.</p> <p>Using the above information answer the following questions:</p> <p>a) Name the types of quadrilaterals formed?</p> <p>b)If the quadrilateral has three acute angles each measuring <math>70^\circ</math>. Then what is the measure of the fourth angle?</p> <p>c)The diagonals of a rectangle are <math>(2x + 4)\text{cm}</math> and <math>(3x + 1)\text{cm}</math>. Find the value of <math>x</math>.</p>
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