BCM SCHOOL, BASANT AVENUE, DUGRI ROAD, LUDHIANA
CLASS: VIII
SUBJECT: MATHEMATICS
TOPIC: UNDERSTANDING QUARDILATERALS AND FACTORISATION
ASSIGNMENT

1. The adjacent angles of a parallelogram are in the ratio $4: 5$, then its smallest angle is
a) $60^{\circ}$
b) $100^{\circ}$
c) $80^{\circ}$
d) $90^{\circ}$
2. The factorization of $x^{2}+x y-5 x-5 y$ is
a) $(x+5)(x-y)$
b) $(x+5)(y-5)$
c) $(x-5)(x+y)$
d) $(x+5)(x+y)$
3. Assertion (A) - The measures of each of the four angles of a quadrilateral are equal.

Reason ( R ) - In geometry a quadrilateral is a four-sided polygon, having four edges (sides) and four corners (vertices)
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
4. Two adjacent angles of a parallelogram are $(3 x-4)^{\circ}$ and $(3 x+10)^{\circ}$. Find the angles of the parallelogram.
5. Factorise: $3 a^{4}-48 b^{4}$

6 . Find the value of $x, y$ and $z$ from the given parallelogram.


## 7. CASE STUDY

During maths lab activity each students was given four broom sticks of length $8 \mathrm{~cm}, 8 \mathrm{~cm}, 5 \mathrm{~cm}, 5 \mathrm{~cm}$ to make different types of quadrilaterals.

Using the above information answer the following questions:
a) How many types of quadrilaterals can be formed using these sticks?
b) Name the types of quadrilaterals formed?
c) In a parallelogram $A B C D$ if $\angle A$ is $\frac{4}{5}$ of $\angle B$, then what is the measure of $\angle A$ ?
d) If the quadrilateral has three acute angles each measuring $70^{\circ}$. Then what is the measure of the fourth angle?

