

**BHARATIYA VIDYA BHAVAN'S V.M.PUBLIC SCHOOL  
VADODARA**

<b>Date:</b>	<b>Worksheet-FACTORISATION</b>	<b>Subject: Mathematics</b>
<b>Class: VIII</b>	<b>Name of the student:</b>	

1) Fill in the blanks:

- a)  $28x^6 \div 7x^5 =$  \_\_\_\_\_
- b)  $9p^3 q^2 \times (-3p^2 q^2) =$  \_\_\_\_\_
- c) GCF of  $25x^3 y^2$  and  $10x^2 y^3 z$  is \_\_\_\_\_
- d)  $2px + qx + 2py + qy = (2p + q) \times$  (\_\_\_\_\_)
- e)  $(a + b)(x + y) - c(x + y) = (x + y) \times$  \_\_\_\_\_
- f)  $(4y - 3)(4y + 3) =$  \_\_\_\_\_

2) Resolve the following into factors:

- a)  $25a^2 + b^2 + 10ab - c^2$
- b)  $4x^2 + 20x + 25 - 16y^2$
- c)  $ax^2 - ay^2 - by^2 + bx^2$

3) Factorize the following expressions:

- a)  $x^4 + 2x^2 y^2 + y^4$
- b)  $49y^2 + 70yz + 25z^2$
- c)  $4a^2 + 4 - 8a$
- d)  $x^2 y^2 + 2xyab + b^2 a^2$
- e)  $81p^2 + 54pq + 9q^2$

4) Factorize:

- a)  $100 - p^2$
- b)  $a^2 - (b + c)^2$
- c)  $112p^2 - 7q^2$
- d)  $5a^2 m^4 - 80n^4 a^6$

5) Factorize the following:

- a)  $x^2 - 5x - 24$
- b)  $x^2 - x - 110$
- c)  $x^2 + 6x + 5$
- d)  $m^2 + 11mn + 18n^2$
- e)  $y^2 - ky - 2k^2$