

## Assignment : Factorization

Date \_\_\_\_\_

**Factor each completely.**

1)  $5n^3 - 20n^2 + 2n - 8$

2)  $40x^3 - 32x^2 - 5x + 4$

**Factor the common factor out of each expression.**

3)  $18x^3 - 60x$

4)  $70k^2 - 50k$

5)  $8k^5 - 16k^4$

6)  $-7x^4y^2z + 7x^4y^3z^3$

**Factor each completely.**

7)  $x^2 + 4x + 4$

8)  $16x^2 - 25$

**Factor the common factor out of each expression.**

9)  $30a^6b^2 - 20c^3 - 50$

10)  $144k + 84k^3hj + 132k^8j$

## Answers to Assignment : Factorization

$$1) (5n^2 + 2)(n - 4)$$

$$5) 8k^4(k - 2)$$

$$9) 10(3a^6b^2 - 2c^3 - 5)$$

$$2) (8x^2 - 1)(5x - 4)$$

$$6) 7x^4y^2z(-1 + yz^2)$$

$$10) 12k(12 + 7hjk^2 + 11jk^7)$$

$$3) 6x(3x^2 - 10)$$

$$7) (x + 2)^2$$

$$4) 10k(7k - 5)$$

$$8) (4x + 5)(4x - 5)$$

