

## UNIT EXAM: FACTORING REVIEW

**FACTOR USING GCF METHOD.**

1)  $-6x^2y^4z^2 - 9xy^3z^3 - 9xy^3z^2$

2)  $p^2n^2 - 2p^2m^2 + 3p^2$

**FACTOR BY USING GROUPING METHOD.**

3)  $12r^3 + 30r^2 - 10r - 25$

4)  $2n^3 - 7n^2 + 8n - 28$

**FACTOR EACH TRINOMIAL.**

5)  $m^2 + 4m - 12$

6)  $k^2 - k - 12$

**EXPAND EACH EXPRESSION.**

7)  $(8m + 7)(8m - 7)$

8)  $(6r + 6)(6r - 6)$

**SOLVE EACH TRINOMIAL BY FACTORING.**

9)  $(b - 1)(3b - 8) = 0$

10)  $v^2 + 7v + 10 = 0$

## UNIT EXAM: FACTORING REVIEW

**FACTOR USING GCF METHOD.**

$$1) -6x^2y^4z^2 - 9xy^3z^3 - 9xy^3z^2$$
$$-3xy^3z^2(2xy + 3z + 3)$$

$$2) p^2n^2 - 2p^2m^2 + 3p^2$$
$$p^2(n^2 - 2m^2 + 3)$$

**FACTOR BY USING GROUPING METHOD.**

$$3) 12r^3 + 30r^2 - 10r - 25$$
$$(6r^2 - 5)(2r + 5)$$

$$4) 2n^3 - 7n^2 + 8n - 28$$
$$(n^2 + 4)(2n - 7)$$

**FACTOR EACH TRINOMIAL.**

$$5) m^2 + 4m - 12$$
$$(m - 2)(m + 6)$$

$$6) k^2 - k - 12$$
$$(k + 3)(k - 4)$$

**EXPAND EACH EXPRESSION.**

$$7) (8m + 7)(8m - 7)$$
$$64m^2 - 49$$

$$8) (6r + 6)(6r - 6)$$
$$36r^2 - 36$$

**SOLVE EACH TRINOMIAL BY FACTORING.**

$$9) (b - 1)(3b - 8) = 0$$
$$\left\{1, \frac{8}{3}\right\}$$

$$10) v^2 + 7v + 10 = 0$$
$$\{-2, -5\}$$