

## Algebra II Practice A.APR.C.4: Polynomial Identities

www.jmap.org

NAME: \_\_\_\_\_

Divide:

1.  $(d^3 - 216) \div (d - 6)$

- [A]  $d^2 + 6d + 36$       [B]  $d^2 + 36$   
 [C]  $d^2 - 36$       [D]  $d^2 - 6d + 36$

6.  $(x^3 + 64) \div (x + 4)$

- [A]  $x^2 - 4x + 16$       [B]  $x^2 + 4x + 16$   
 [C]  $x^2 - 16$       [D]  $x^2 + 16$

2.  $(c^3 + 27) \div (c + 3)$

- [A]  $c^2 - 9$       [B]  $c^2 + 3c + 9$   
 [C]  $c^2 + 9$       [D]  $c^2 - 3c + 9$

7.  $(b^3 + 512) \div (b + 8)$

- [A]  $b^2 - 64$       [B]  $b^2 + 8b + 64$   
 [C]  $b^2 + 64$       [D]  $b^2 - 8b + 64$

3.  $(t^3 - 1) \div (t - 1)$

- [A]  $t^2 + 1$       [B]  $t^2 - t + 1$   
 [C]  $t^2 - 1$       [D]  $t^2 + t + 1$

8.  $(z^3 - 729) \div (z - 9)$

- [A]  $z^2 + 9z + 81$       [B]  $z^2 - 81$   
 [C]  $z^2 + 81$       [D]  $z^2 - 9z + 81$

4.  $(q^3 + 343) \div (q + 7)$

- [A]  $q^2 + 49$       [B]  $q^2 - 49$   
 [C]  $q^2 - 7q + 49$       [D]  $q^2 + 7q + 49$

9.  $(k^3 + 125) \div (k + 5)$

- [A]  $k^2 + 5k + 25$       [B]  $k^2 - 5k + 25$   
 [C]  $k^2 + 25$       [D]  $k^2 - 25$

5.  $(w^3 - 8) \div (w - 2)$

- [A]  $w^2 + 4$       [B]  $w^2 - 4$   
 [C]  $w^2 - 2w + 4$       [D]  $w^2 + 2w + 4$

10.  $(h^3 - 27) \div (h - 3)$

- [A]  $h^2 - 3h + 9$       [B]  $h^2 + 9$   
 [C]  $h^2 - 9$       [D]  $h^2 + 3h + 9$

Algebra II Practice A.APR.C.4: Polynomial Identities

www.jmap.org

[1] A \_\_\_\_\_

[2] D \_\_\_\_\_

[3] D \_\_\_\_\_

[4] C \_\_\_\_\_

[5] D \_\_\_\_\_

[6] A \_\_\_\_\_

[7] D \_\_\_\_\_

[8] A \_\_\_\_\_

[9] B \_\_\_\_\_

[10] D \_\_\_\_\_