

**Factor****Binomials****Sum/Difference of Cubes**

1. factor  $x^3 + 27$

2. factor  $x^3 + 64$

3. factor  $x^3 + 125$

4. factor  $a^3 + 64$

5. factor  $a^3 + 1$

6. factor  $x^3 + 8$

7. factor  $u^3 + 1$

8. factor  $u^3 + 8$

9. factor  $u^3 + 27$

10. factor  $a^3 + 125$

**Answers****Factor****Binomials****Sum/Difference of Cubes**

1.  $(x + 3)(x^2 - 3x + 9)$

2.  $(x + 4)(x^2 - 4x + 16)$

3.  $(x + 5)(x^2 - 5x + 25)$

4.  $(a + 4)(a^2 - 4a + 16)$

5.  $(a + 1)(a^2 - a + 1)$

6.  $(x + 2)(x^2 - 2x + 4)$

7.  $(u + 1)(u^2 - u + 1)$

8.  $(u + 2)(u^2 - 2u + 4)$

9.  $(u + 3)(u^2 - 3u + 9)$

10.  $(a + 5)(a^2 - 5a + 25)$