

## Factoring- STATION 2

Date \_\_\_\_\_ Period \_\_\_\_\_

**Factor each completely.**

1)  $x^6 - 216y^6$

2)  $xm^6 + xn^6$

3)  $3x^7 + 648xy^6$

4)  $2x^7m - 54xmy^6$

5)  $yx^6 - 27y^7$

6)  $u^6 + 64v^6$

7)  $4ba^6 + 864b^7$

8)  $m^6 + 216n^6$

9)  $3m^7x - 24mxn^6$

10)  $m^6 - n^6$

## Answers to Factoring- STATION 2 (ID: 1)

1)  $(x^2 - 6y^2)(x^4 + 6x^2y^2 + 36y^4)$

3)  $3x(x^2 + 6y^2)(x^4 - 6x^2y^2 + 36y^4)$

5)  $y(x^2 - 3y^2)(x^4 + 3x^2y^2 + 9y^4)$

7)  $4b(a^2 + 6b^2)(a^4 - 6a^2b^2 + 36b^4)$

9)  $3mx(m^2 - 2n^2)(m^4 + 2m^2n^2 + 4n^4)$

2)  $x(m^2 + n^2)(m^4 - m^2n^2 + n^4)$

4)  $2xm(x^2 - 3y^2)(x^4 + 3x^2y^2 + 9y^4)$

6)  $(u^2 + 4v^2)(u^4 - 4u^2v^2 + 16v^4)$

8)  $(m^2 + 6n^2)(m^4 - 6m^2n^2 + 36n^4)$

10)  $(m - n)(m + n)(m^4 + m^2n^2 + n^4)$