

1) Factor:  $x^3 + y^3$

2) Factor:  $g^3 + 8$

3) Factor:  $y^6 + 27$

4) Factor:  $125d^3 + 216$

5) Factor:  $8h^3 + 125b^9$

6) Fill in the missing parts:  $\underline{\hspace{1cm}} + y^3 = (m + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - my + \underline{\hspace{1cm}})$

7) Fill in the missing parts:  $27r^6 + \underline{\hspace{1cm}} = (\underline{\hspace{1cm}} + \underline{\hspace{1cm}})(\underline{\hspace{1cm}} - 3r^2p + p^2)$

8) Fill in the missing parts:  $8g^3 + 27m^3 = (\underline{\hspace{1cm}} + \underline{\hspace{1cm}})(4g^2 - \underline{\hspace{1cm}} + \underline{\hspace{1cm}})$

9) Fill in the missing parts:  $\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = (d + 4z)(d^2 - 4dz + 16z^2)$