

Name : \_\_\_\_\_

## Factors: Algebraic Identities

ES1

Factorize each expression using algebraic identities.

1)  $x^3 + 15x^2 + 75x + 125$

2)  $u^3v^3 - 27u^2v^2 + 243uv - 729$

3)  $s^3 + 3s + \frac{3}{s} + \frac{1}{s^3}$

$p + 343$

5)  $g^3 - 3g^2h + 3gh^2 - h^3$

$- w^3$

7)  $y^3 - 24y^2 + 192y - 512$

$+ 48mn + 64$

# PREVIEW

Gain complete access to the largest collection of worksheets in all subjects!

Members, please log in to download this worksheet.

Not a member? Please sign up to gain complete access.

[www.mathworksheets4kids.com](http://www.mathworksheets4kids.com)

9)  $\frac{1}{a^3} + \frac{3}{a^2b} + \frac{3}{ab^2} + \frac{1}{b^3}$

10)  $k^3 - 6k^2 + 12k - 8$