

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

## Expand: Algebraic Identities

ES2

Expand each expression using algebraic identities.

1)  $\left(p + \frac{1}{q}\right)\left(2p + \frac{1}{q}\right)$

2)  $(k^2 + 6)(k^2 - 6)$

3)  $(m - 5)^2$

5)  $(u - 3v + 9)$

7)  $\left(8s + \frac{1}{t}\right)\left(8s\right)$

9)  $(3a - b)^2$

10)  $(r - 7)(r - 1)$

# 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)

**Expand: Algebraic Identities**

Expand each expression using algebraic identities.

1)  $\left(p + \frac{1}{q}\right)\left(2p + \frac{1}{q}\right)$

$$2p^2 + \frac{1}{q^2} + \frac{3p}{q}$$

2)  $(k^2 + 6)(k^2 - 6)$

$$k^4 - 36$$

3)  $(m - 5)^2$

$$m^2 - 10m + 25$$

5)  $(u - 3v + 9)^2$

$$u^2 + 9v^2 - 6uv + 18u - 54v + 81$$

7)  $\left(8s + \frac{1}{t}\right)\left(8s - \frac{1}{t}\right)$

$$64s^2 - \frac{1}{t^2}$$

9)  $(3a - b)^2$

$$9a^2 - 6ab + b^2$$

10)  $(r - 7)(r - 1)$

$$r^2 - 8r + 7$$

**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)