

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

## Dividing Polynomials

Sheet 1

- 1) The area of a rectangle is  $2r^5 - 15r^4 - 23r^3 + 5r^2 + 9r - 2$ . Find the width of the rectangle, if the length is  $r^2 - 9r + 2$ .

\_\_\_\_\_

- 2) Find the base of the triangle, if the area is  $2u^4 + u^3 - 5u^2 - 39u + 35$  and the height is  $2u - 5$ .

\_\_\_\_\_

- 3) The volume of a \_\_\_\_\_ of the rectangle \_\_\_\_\_ the width and height \_\_\_\_\_ and the length.

\_\_\_\_\_

- 4) Find the height of \_\_\_\_\_ base of the paral \_\_\_\_\_  $+ 41b + 15$  and the

\_\_\_\_\_

- 5) The area of a kite is  $6k^3 + 11k^2 - 24k - 44$ . If one of the diagonals measures  $k^2 - 4$ , determine the length of the other diagonal.

\_\_\_\_\_

**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)

**Dividing Polynomials**

- 1) The area of a rectangle is  $2r^5 - 15r^4 - 23r^3 + 5r^2 + 9r - 2$ . Find the width of the rectangle, if the length is  $r^2 - 9r + 2$ .

$$\underline{2r^3 + 3r^2 - 1}$$

- 2) Find the base of the triangle, if the area is  $2u^4 + u^3 - 5u^2 - 39u + 35$  and the height is  $2u - 5$ .

**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)

- 3) The volume of a rectangular prism is  $2x^3 + 13x^2 + 14x + 7$ . Find the width and height of the rectangular prism, if the length is  $x + 2$ .

- 4) Find the height of a parallelogram with a base of  $3b^2 + 4b + 15$  and the area  $6b^3 + 17b^2 + 15b + 22$ .

$$\underline{b^2 + 2b + 5}$$

- 5) The area of a kite is  $6k^3 + 11k^2 - 24k - 44$ . If one of the diagonals measures  $k^2 - 4$ , determine the length of the other diagonal.

$$\underline{12k + 22}$$