

## Factor Theorem Worksheets

Determine whether each binomial is a factor of the given polynomial.

$$(x^4 - 8x^3 + 18x^2 - 24x + 45) \div (x - 2)$$

$$(x^4 - 4x^2 - 45) \div (x - 3)$$

$$(x^5 - 4x^4 - 25x + 100) \div (x - 3)$$

$$(x^4 - 19x^3 + 135x^2 - 425x + 500) \div (x - 4)$$

$$(x^5 + 4x^4 - 9x - 36) \div (x + 4)$$

## Factor Theorem Worksheets

Determine whether each binomial is a factor of the given polynomial.

$$(x^4 - 8x^3 + 18x^2 - 24x + 45) \div (x - 2)$$

No , R = 21

$$(x^4 - 4x^2 - 45) \div (x - 3)$$

Yes

$$(x^5 - 4x^4 - 25x + 100) \div (x - 3)$$

No , R = -56

$$(x^4 - 19x^3 + 135x^2 - 425x + 500) \div (x - 4)$$

No

$$(x^5 + 4x^4 - 9x - 36) \div (x + 4)$$

Yes