Name	
Date	Period

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

$$f(x) = 2x^3 - 3x^2 - 4x - 12$$

What is the value of...

f(3)

Remainder Theorem

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

$$f(x) = 2x^3 - 3x^2 - 4x - 12$$

What is the value of...

f(-2)

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

$$f(x) = 2x^3 - 3x^2 - 4x - 12$$

What is the value of...

f(4)

Remainder Theorem

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

$$f(x) = x^4 + 3x^3 - 2x^2 + x + 5$$

What is the value of...

f(1)

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

$$f(x) = x^4 + 3x^3 - 2x^2 + x + 5$$

What is the value of...

f(-3)

Remainder Theorem

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

$$f(x) = x^4 + 3x^3 - 2x^2 + x + 5$$

What is the value of...

f(5)

If polynomial f(x) is divided by (x - a), then the remainder is equal to f(a).

Synthetic substitution to evaluate polynomial functions

f(a) = the remainder when f(x) is divided by (x - a).