

## Evaluating Polynomial Functions

A) Evaluate each function at the specified values.

1)  $f(x) = 4x^5 + 3x^2 - 11$  ;  $x = -3$

2)  $f(x) = 6x^6 - x^5 - 6x^4 + 5x^3 - x^2 - 4x + 1$  ;  
 $x = 1$

\_\_\_\_\_

\_\_\_\_\_

B) Evaluate each function.

1)  $f(x) = x^5 + 6x^3$  ; find  $f(-4)$

\_\_\_\_\_

\_\_\_\_\_

C) If  $f(x) = x^3 - 5x^2 - 15$

1)  $f(8) =$  \_\_\_\_\_

3)  $f(-5) =$  \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

D) If  $f(x) = x^6 - 7x^5 + 6$  ;

1)  $\frac{f(3)}{7f(0)} =$  \_\_\_\_\_

3)  $8f(-2) - f(-3) =$  \_\_\_\_\_

4)  $f(5) \times f(1) =$  \_\_\_\_\_

= \_\_\_\_\_

E) What is the value of  $f(-6)$ , if  $f(x) = -2x^3 + 8x - 13$ ?

i) 383

ii) -317

iii) 371

iv) -371

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**Evaluating Polynomial Functions**

A) Evaluate each function at the specified values.

1)  $f(x) = 4x^5 + 3x^2 - 11 ; x = -3$

2)  $f(x) = 6x^6 - x^5 - 6x^4 + 5x^3 - x^2 - 4x + 1 ; x = 1$

**-956**

**0**

B) Evaluate each function.

1)  $f(x) = x^5 + 6x^3 ; f(2)$

$f(-4)$

**80**

**3**

C) If  $f(x) = x^3 - 5x^2 - 15$

1)  $f(8) =$  \_\_\_\_\_

**-15**

3)  $f(-5) =$  \_\_\_\_\_

**485**

D) If  $f(x) = x^6 - 7x^5 + 6$  ;

1)  $\frac{f(3)}{7f(0)} =$  \_\_\_\_\_

**68**

3)  $8f(-2) - f(-3) =$  \_\_\_\_\_

**-84**

4)  $f(5) \times f(1) =$  \_\_\_\_\_

**0**

E) What is the value of  $f(-6)$ , if  $f(x) = -2x^3 + 8x - 13$ ?

i) 383

ii) -317

iii)  371

iv) -371