

# Evaluating Polynomial Functions

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A) Evaluate each function at the specified value.

1)  $f(x) = -3x^4 - 2x + 10; x = -1$

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2)  $f(x) = -x^3 - 1; x = 3$

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

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4)  $f(x) = -7x^5 + x^2 - 8x + 12; x = 0$

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B) Evaluate each function.

1) If  $f(x) = 2x^3$ , what is  $f(1)$ ?

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2) If  $f(x) = 3x^5 + 9x^4 + 12$ , what is  $f(-4)$ ?

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3) If  $f(x) = 6x^3 - 2x + 1$ , what is  $f(5)$ ?

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4) If  $f(x) = -x^4 - 7x^3 + 5$ , what is  $f(-7)$ ?

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C) What is the value of  $f(-3)$  if  $f(x) = -(-x^5 + x^4 - 1) - 13$ ?

i) -336

ii) -335

iii) -333

iv) -337