

## Evaluating Polynomial Functions

A) Evaluate each function at the specified value. Round your answer to the nearest tenth.

1)  $f(x) = \frac{1}{5}x^3 - \frac{4}{3}x^2 - 7x + 5$  ;  $x = 9$

2)  $f(x) = x^6 - x^3 - 9$  ;  $x = -1.1$

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B) Evaluate each function. Round your answer to the nearest tenth.

1)  $f(x) = 9x^5 + 3x^4 - 5x^2 + 2$  ;

2)  $f(x) = x^3 + 8x^2 - 6x$  ;

find  $f\left(-\frac{2}{3}\right)$

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\_\_\_\_\_

C) If  $f(x) = 3x^4 + 2x^3 - 6x$ ,  
tenth.

1)  $f(1.8) =$  \_\_\_\_\_

3)  $f\left(\frac{3}{2}\right) =$  \_\_\_\_\_

D) If  $f(x) = \frac{x^4 + 3x}{2}$  ; find

1)  $6f(6) - 2f(-8)$

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\_\_\_\_\_

E) What is the value of  $f(7)$ , if  $f(x) = x^3 - 1.6x^2 - x + 7$ ?

i) 246.4

ii) 642.4

iii) 462.6

iv) 264.6

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answer to the nearest

nearest tenth.

## Evaluating Polynomial Functions

A) Evaluate each function at the specified value. Round your answer to the nearest tenth.

1)  $f(x) = \frac{1}{5}x^3 - \frac{4}{3}x^2 - 7x + 5 ; x = 9$

2)  $f(x) = x^6 - x^3 - 9 ; x = -1.1$

$-\frac{101}{5}$  or  $-20\frac{1}{5}$

$-5.9$

B) Evaluate each function. Round your answer to the nearest tenth.

1)  $f(x) = 9x^5 + 3x^4 - 5x^2 + 2 ;$

2)  $f(x) = x^3 + 8x^2 - 6x ;$

find  $f\left(-\frac{2}{3}\right)$

$-\frac{22}{27}$

$1.8$

C) If  $f(x) = 3x^4 + 2x^3 - 6x$ , find  $f(1.8)$  and  $f\left(\frac{3}{2}\right)$ . Round your answer to the nearest tenth.

1)  $f(1.8) =$  \_\_\_\_\_

$56.9$

3)  $f\left(\frac{3}{2}\right) =$  \_\_\_\_\_

$-\frac{82}{27}$  or  $-3\frac{1}{27}$

D) If  $f(x) = \frac{x^4 + 3x}{2}$ ; find  $6f(6) - 2f(-8)$ . Round your answer to the nearest tenth.

1)  $6f(6) - 2f(-8)$

$-130$

$108.1$

E) What is the value of  $f(7)$ , if  $f(x) = x^3 - 1.6x^2 - x + 7$ ?

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ii) 642.4

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