



Evaluate polynomial functions

- 1** What is the term in this number sequence when $y = 3$

$$2 - 9y$$

A 3	B -28	C 15
D -24	E -25	F 25

- 2** What is the term in this number sequence when $m = 2$

$$4m^2 + 2$$

A 12	B 18	C 34
D 24	E 4	

- 3** Which table of values matches the function?

$$f(x) = 2x^2 + 2x + 7$$

A

x	f(x)
0	7
1	11
2	19
6	91

B

x	f(x)
0	7
1	10
2	17
6	85

- 4** Is $(x + 1)$ a factor of $f(x)$?
- $$f(x) = x^4 - 2x^3 - 7x^2 + 8x + 12$$

A No	B Yes
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- 5** Find the remainder when $f(x)$ is divided by $(x + 2)$.

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

A -2	B 12
C 0	



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What are the critical values (y-values) of the extrema (maxima or minima)?

$$f(x) = -2x^3 - 6x^2 + 18x + 2$$

A $y = -52, 12$

B $y = -52$

C $y = -3, 1$

D $y = -20$

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What are the critical points of the function?

$$f(x) = -2x^3 + 12x^2 - 18x$$

A $(1, 0)$ and $(3, 0)$

B $(2, -4)$

C $(1, 0)$ and $(3, -8)$

D $(1, -8)$ and $(3, 0)$

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What are the critical points of the function?

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

$$f'(x) = 6x^2 + 12x$$

$$f''(x) = 12x + 12$$

A $(-2, 0)$ and $(0, 0)$

B $(-1, 0)$

C $(-2, 4)$ and $(0, -4)$

D $(-2, -4)$ and $(0, 4)$

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What is the term in this number sequence when $x = 2$

$$7x^2 + 6$$

A 21

B 31

C 62

D 42

E 17

F 34

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Which table of values matches the function?

$$p(x) = 3x^2 - 4x + 3$$

A

x	p(x)
-4	67
-3	42
1	2
5	58

B

x	p(x)
-4	99
-3	60
1	4
5	108