



## Factor Theorem - Is the Binomial a Factor (Yes/No)

1 Is  $(x - 0)$  a factor of  $f(x)$ ?

$$f(x) = x^4 + 4x^3 - 3x^2 - 18x$$

A Yes

B No

2 Is  $(x + 1)$  a factor of  $f(x)$ ?

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

A Yes

B No

3 Is  $(x - 1)$  a factor of  $f(x)$ ?

$$f(x) = x^5 + 2x^4 - 7x^3 - 8x^2 + 12x$$

A No

B Yes

4 Is  $(x + 3)$  a factor of  $f(x)$ ?

$$f(x) = x^3 + 9x^2 + 27x + 27$$

A Yes

B No

5 Is  $(x - 1)$  a factor of  $f(x)$ ?

$$f(x) = x^3 + 6x^2 + 9x$$

A No

B Yes

6 Is  $(x - 2)$  a factor of  $f(x)$ ?

$$f(x) = x^4 + 3x^3 - 7x^2 - 15x + 18$$

A Yes

B No

7 Is  $(x - 0)$  a factor of  $f(x)$ ?

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

A Yes

B No

8 Is  $(x + 1)$  a factor of  $f(x)$ ?

$$f(x) = x^5 + 2x^4 - 5x^3 - 10x^2 + 4x + 8$$

A No

B Yes