Brainbox learn easy

Chapter 02

POLYNOMIALS

Example:

Check $(x-2)$ is a factor of $x^3+3x^2-4x-12$.

Solution:

Let $g(x)=x-2=0$

$\Rightarrow \boxed{x=2}$

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

If $x=2$

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

$=8+12-8-12$

$f(2)=0$

$\therefore (x-2)$ is a factor of $x^3+3x^2-4x-12$.