

- Determine if $(x - 1)$ is a factor of $f(x) = 7x^8 + 4x^5 - 9x^3 - x^2 - x$. Do you notice another factor?

IF $f(1) = 0$, THEN $X-1$ IS A FACTOR.

LET'S CHECK...

$$f(1) = 7 + 4 - 9 - 1 - 1 = 0$$

THEREFORE $X-1$ IS A FACTOR.

IT IS ALSO VERY EASY TO NOTICE THAT X IS

A FACTOR.