

Practice

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

$$x - 1$$

$$x + 3$$

Practice

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

$$\begin{array}{r|rrrr} x-1 & 1 & 3 & -5 & 1 \\ & \downarrow & & & \\ \hline & 1 & 4 & -1 & 0 \end{array}$$

yes $x-1$ is a factor

$$\begin{array}{r|rrrr} x+3 & 1 & 3 & -5 & 1 \\ & \downarrow & & & \\ \hline & 1 & 0 & -5 & 16 \end{array}$$

NO $x+3$ is NOT a factor