

#3 ~ Sect. 6.3: Dividing Polynomials Using Long Division

Ex. 1: Divide $x^2 + 2x - 30$ by $x - 5$.

Ex. 2: Divide $x^2 - 3x + 1$ by $x - 4$.

If a polynomial is a factor of another polynomial,
when you divide them,
the remainder will be zero.

Ex. 3: Determine whether $x + 2$ is a factor of each polynomial.

a) $x^2 + 10x + 16$

b) $x^3 + 7x^2 - 5x - 6$