

# Finding Roots of Polynomials

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**Rational Root Theorem:** If  $\frac{p}{q}$  is a root of

$$P(x) = a_n x^n + a_{n-1} x^{n-1} + \cdots + a_2 x^2 + a_1 x + a_0$$

then  $p$  divides  $a_0$  and  $q$  divides  $a_n$

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Once we know what our root *might be*, we need to evaluate our polynomial to find out if the possible root is actually a root.