

I. FIND ALL ROOTS OF EACH POLYNOMIAL FUNCTION.

1. $P(x) = 2x^3 + x^2 - 13x + 6$

2. $P(x) = x^5 - 2x^4 + x^3 - 2x^2 - 2x + 4$

3. $P(x) = 2x^4 - 2x^3 + 5x^2 + 17x - 22$

* REMEMBER:
 QUADRATIC FORMULA
 CAN SOLVE QUADRATIC
 EQUATIONS THAT
CAN'T BE FACTORED!

II. SIMPLIFY.

4. $\frac{x+2}{x^2-x} - \frac{3x}{x^2-2x+1}$

5. $\frac{x+2}{x^2-4} \div \frac{x+3}{x-2}$

6. $\frac{1}{x+1} + \frac{x}{x-6} - \frac{5x-2}{x^2-5x-6}$

III. COMPLETE THE TABLE.

FUNCTION	DEGREE	ROOTS/y-INT	ORIENTATION	SKETCH
$P_1(x) = -x^3 + 13x - 12$				
$P_2(x) = (x+2)(x-2)(x+1)(x-1)$				
$P_3(x) =$				