



1. Determine the possible rational zeros of the polynomial. Show how you determine these possible roots/zeros.

$$P(x) = 3x^4 - 2x^3 + 7x^2 - 21$$

List all possible zeros:

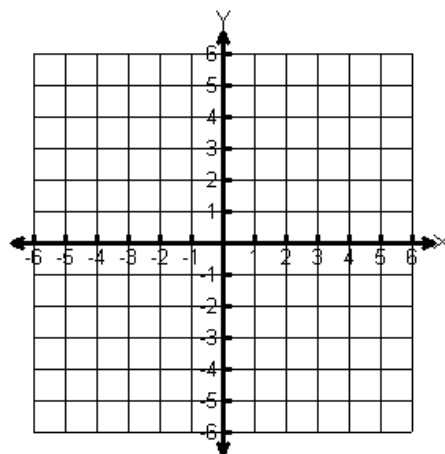
2. Determine the following for the given polynomial: $P(x) = x^3 - x^2 - 5x + 5$

a) possible rational zeros:

b) rational zeros:

c) all zeros:

d) linear factors:



3. Determine the possible rational zeros of the polynomial: $P(x) = 3x^4 - 2x^3 + 7x - 24$

List all possible zeros:

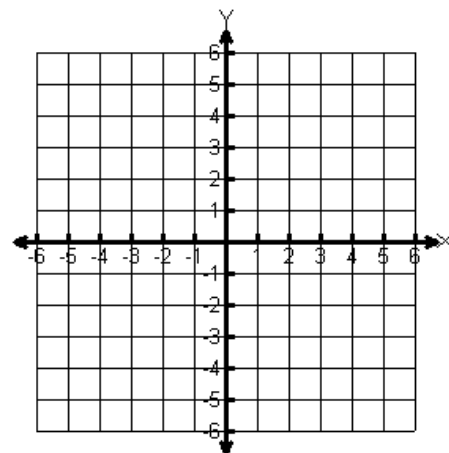
4. Determine the following for the given polynomial: $P(x) = x^3 - 2x^2 - 7x + 14$

a) possible rational zeros:

b) rational zeros:

c) all zeros:

d) linear factors:



5. $f(x) = 2x^3 - x^2 - 22x - 24$

synthetic division

possible zeros:

zeros: _____

linear factors: _____

6. $g(x) = 5x^3 + 12x^2 - 29x + 12$

possible zeros:

zeros: _____

linear factors: _____

7. $g(x) = 2x^3 + 3x^2 - 17x + 12$

possible zeros:

zeros: _____

linear factors: _____

8. $f(x) = 2x^3 - 5x^2 - 14x + 8$

possible zeros:

zeros: _____

linear factors: _____

9. $g(x) = 4x^3 + 9x^2 - 49x + 30$

possible zeros:

zeros: _____

linear factors: _____