Rational Zero Test Homework   **Name** _____

1.) $y = x^3 + 7x^2 + 7x - 15$

   number of complex roots:
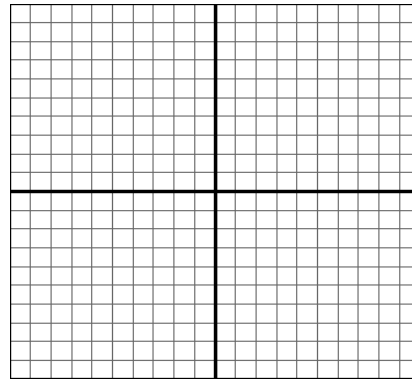
   number of possible positive roots: *number of possible negative roots:*

   Is 1 a root?   *Is –1 a root?*

   possible roots: $\dfrac{\text{factors of}}{\text{factors of}} = \underline{\hspace{2cm}} =$

2.) $y = x^3 - 7x - 6$

   number of complex roots:

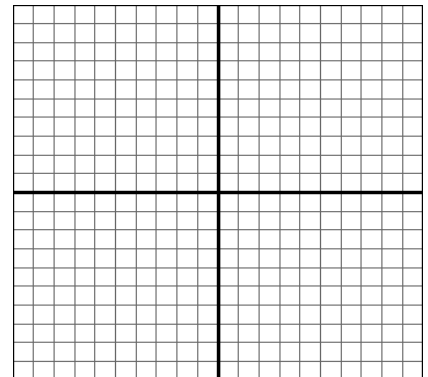   *number of possible positive roots:*   *number of possible negative roots:*

   Is 1 a root?   *Is –1 a root?*

   possible roots: $\dfrac{\text{factors of}}{\text{factors of}} = \underline{\hspace{2cm}} =$

3.) $y = x^4 + 2x^3 - 9x^2 - 2x + 8$

number of complex roots:

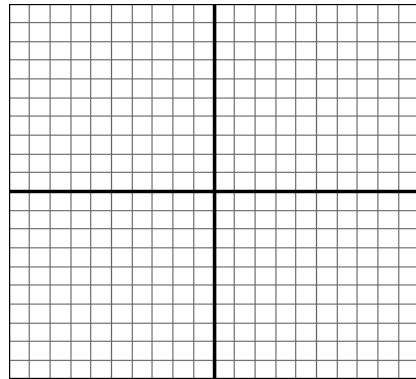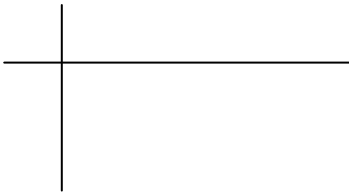*number of possible positive roots:*   *number of possible negative roots:*

Is 1 a root?   *Is –1 a root?*

possible roots: $\dfrac{\text{factors of}}{\text{factors of}} = \dfrac{\rule{3cm}{0.4pt}}{} =$

4.) $y = 6x^3 + 19x^2 + 2x - 3$

number of complex roots:

number of possible positive roots: *number of possible negative roots:*

Is 1 a root?   *Is –1 a root?*

possible roots: $\dfrac{\text{factors of}}{\text{factors of}} = \dfrac{\rule{3cm}{0.4pt}}{} =$