

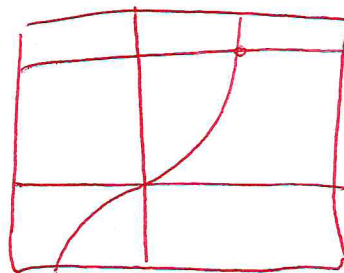
5) After working 4 years at a job, you saved \$2500. The polynomial that represents your saving is $900x^3 + 750x^2 + 320x$. The interest rate equals $x - 1$. Find the interest rate that you have earned.

(C)

$$y_1 = 900x^3 + 750x^2 + 320x$$

$$y_2 = 2500$$

The interest rate that would've allowed you to earn \$2500 is 10.8%



$$x \approx 1.108$$

$$r = x - 1$$

$$r = 1.108 - 1 = .108$$

$$.108 = 10.8\%$$

$[-2, 3]$ by $[-1000, 3000]$

6) Graph by finding the zeros. State any multiplicity. (NC)

$$-x^4 + 13x^2 + 36 = 0$$

$$-x^4 + 13x^2 + 36 = 0$$

-1

$$x^4 - 13x^2 + 36 = 0$$

$$(x^2 - 4)(x^2 - 9) = 0 \quad \text{no multiplicity}$$

$$x^2 - 4 = 0 \quad x^2 - 9 = 0$$

$$x^2 = 4$$

$$x^2 = 9$$

$$x = \pm 2$$

$$x = \pm 3$$

$$EB \quad y = -x^4 \quad \hookleftarrow \quad \downarrow$$

