

Monday 11/13

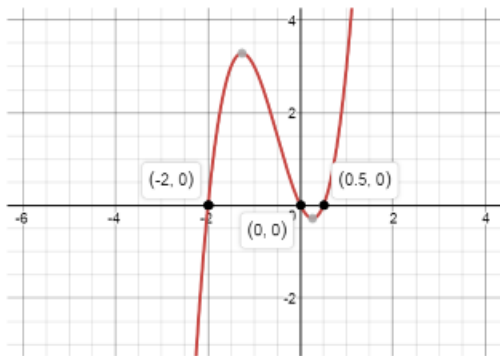
Find the zeros of the following polynomial algebraically
then check your answer by graphing

A) $f(x) = 2x^3 + 3x^2 - 2x$

B) $x^2 - 16 = 0$

a) $f(x) = 2x^3 + 3x^2 - 2x$
GCF $x \cdot (2x^2 + 3x - 2) = 0$
 $x \cdot (2x - 1)(x + 2) = 0$
 $x = 0, x = \frac{1}{2}, x = -2$

X-method
 $\begin{array}{c} -4 \\ 4 \times -1 \\ 3 \end{array}$
 $(x + \frac{4}{2})(x - \frac{1}{2})$
 $(x + 2)(2x - 1)$



$$x^2 - 16 = 0$$

$$(x - 4)(x + 4) = 0 \quad \left(\begin{array}{l} \text{special case} \\ a^2 - b^2 = (a - b)(a + b) \end{array} \right)$$

$$x = 4 \text{ or } x = -4$$