

Ex 2: Use the Rational Zeros Test to list all possible rational zeros of each function:

*correction*

a.  $f(x) = x^3 - 4x^2 - 4x + 16$

factors of  $p = \pm 1, \pm 2, \pm 4, \pm 16$   
 factors of  $q = \pm 1$

$\frac{p}{q} = \pm 1, \pm 2, \pm 4, \pm 16$

b.  $g(x) = 4x^5 - 8x^4 - 5x^3 + 10x^2 + x - 2$

factors of  $p = \pm 1, \pm 2$   
 factors of  $q = \pm 1, \pm 2, \pm 4$

$\frac{p}{q} = \pm \frac{1}{1}, \pm \frac{1}{2}, \pm \frac{1}{4}, \pm \frac{2}{1}, \pm \frac{2}{2}, \pm \frac{2}{4}$  so