

HAT

10/17/16

Graphing Polynomials
Review

THE BEST PREPARATION FOR
tomorrow
IS TO DO
TODAY'S WORK
SUPERBLY WELL.

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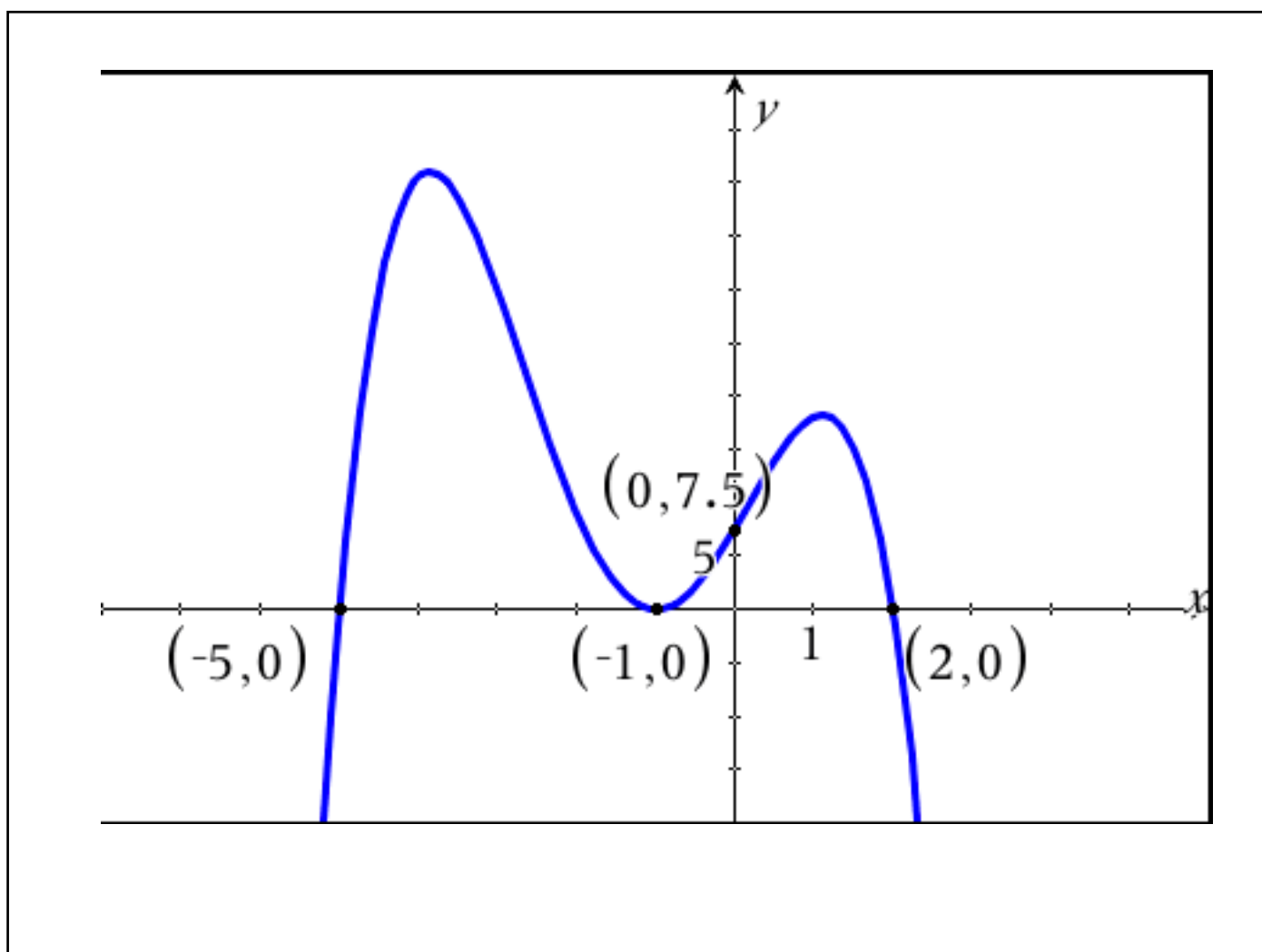
Use LONG DIVISION to find the quotient when $x^4 - 10x^2 + 6$ is divided by $x^2 - 2$.

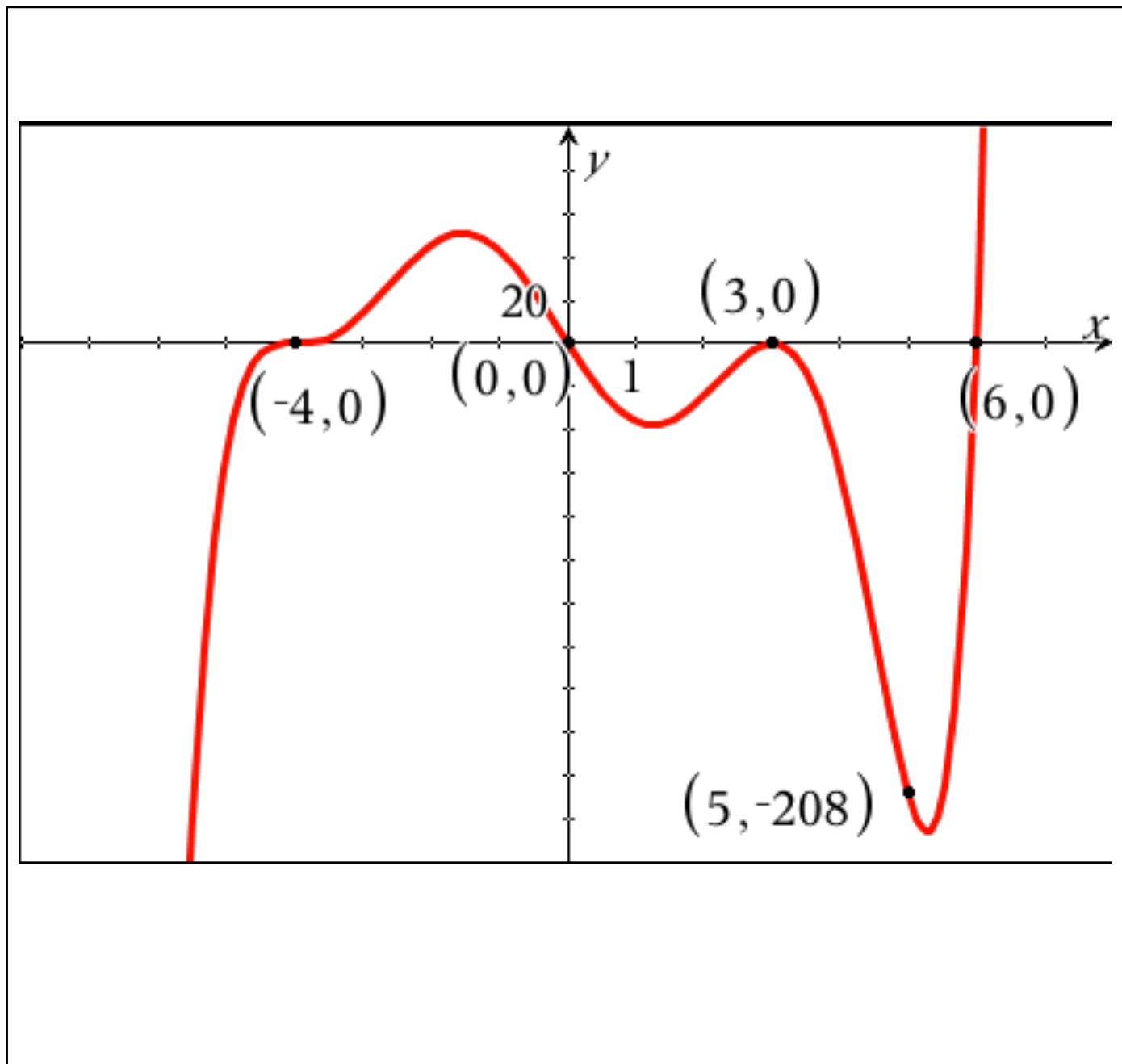
Simplify.

$$\left(\frac{2x^3y^{-2}z^8}{6x^{-2}y^{-5}z^{10}} \right)^{-2}$$

$$\frac{(5p^{-2}q)(4p^5q^{-3})}{(2p^{-5}q^5)(8p^3q)^0}$$

Write an equation for the polynomial equation with x-intercepts $(-3, 0)$ m1, $(1, 0)$ m2, $(5, 0)$ m1, and a y-intercept $(0, 10)$





Given $(4, 0)$ is an x-intercept of multiplicity 2 for

$$p(x) = x^4 - 10x^3 + 35x^2 - 56x + 48$$

- Factor completely
- Sketch
- Write limit statements for the end behavior.

Given $g(x) = 3x^3 + 2x^2 - 19x + 6$

- Make a list of possible rational roots
- Find the zeros
- Sketch

Given $f(x) = -2x^4 - 2x^3 + 16x^2 + 24x$

- Factor completely
- find the x-intercepts
- Sketch the graph.

