

Journal Prompt 13

There are three main exponent rules. For each one, describe the rule in your own words, give another example and explain why it works.

- $x^2 \cdot x^3 = x^5$
- $\frac{x^8}{x^2} = x^6$
- $(x^3)^4 = x^{12}$

Warm Up:

1.) Solve by using u-substitution:

$$(x^2 - 1)^2 - 2(x^2 - 1) - 35 = 0$$

2.) Solve by using u-substitution:

$$x^6 + 7x^3 - 8 = 0$$