

Date _____

Rewriting Expressions - Step-by-Step Lesson

Which expression is equal to $x^8 - y^{10}$? a) $4x^2 - 2y^5$ b) $(x^2)^4 - (y^2)^5$

c) $80(xy)^2$ d) $(x^2)^5 - (y^2)^4$

Explanation:

Choices a and c have whole number variables. We definitely cannot get these terms from our expression. That counts them out. Let's evaluate choice b and d.

b)
$$(x^2)^4 - (y^2)^5$$
 d) $(x^2)^5 - (y^2)^4$

Multiply the exponents to find the final value of the exponents.

b)
$$x^8 - y^{10}$$
 d) $x^{10} - y^8$

Choice b is the same as our original expression.

So the answer is b.

