

## 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.

