Topic: Simplifying Expressions

Problem:

Which of the following expressions is equivalent to the one shown below?
$(b^3 + 5b^2 - 2b) - (b^3 + b - 1)$

Select one:

A. $5b^2 - b$
B. $5b^2 - 3b + 1$
C. $4b^2 - b$
D. $5b^2 - 3b - 1$

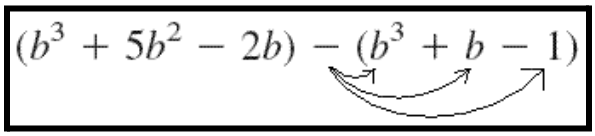
Answer:

B. $5b^2 - 3b + 1$

Scaffold (2 Total):

Scaffold 1/ 2

We need to simplify the expression. Before combining like terms, make sure you distribute the "-" through each of the terms in parentheses after it as shown below. What is the whole expression without the parenthesis?
(insert below image)



A. $b^3 + 5b^2 - 2b - b^3 - b + 1$
B. $b^3 + 5b^2 - 2b - b^3 - 3b + 1$
C. $b^3 + 5b^2 - 2b - b^3 - b - 1$
D. $b^3 + 5b^2 - 2b + 5b^3 - b + 1$

Scaffold Answer 1:
A. $b^3 + 5b^2 - 2b - b^3 - b + 1$

Hint (1 Total):

Hint 1 / 1
Each term in parenthesis after the "-" changes sign.

Scaffold 2/ 2:
Combine the like terms. What expression do you get?

Hint (1 Total):

Hint 1 / 1
(insert below image)