

Do Now

Error Analysis A student was asked to find the difference $(4x^5 - 3x^4 + 6x^2) - (7x^5 - 6x^4 + x^3)$. The student's work is shown at right. Identify the student's error and give the correct difference.

$4x^5 - 3x^4$	$+ 6x^2$
$-7x^5 + 6x^4$	$- x^3$
<hr/>	
$-3x^5 - 9x^4$	$+ x^3 + 6x^2$

The student didn't change the sign for $-6x^4 + x^3$. It should be $-7x^5 + 6x^4 - x^3$ + the final answer should be $-3x^5 + 3x^4 - x^3 + 6x^2$

$$\begin{array}{r}
 (4x^5 - 3x^4 + 6x^2) \\
 + (-7x^5 + 6x^4 - x^3) \\
 \hline
 -3x^5 + 3x^4 - x^3 + 6x^2
 \end{array}$$