Quiz #4

Show your work for all problems. Answers without proper justification may not receive full credit. No use of notes, the textbook, or calculators is permitted on the quiz. There are problems on both sides of the page. Don’t forget to write your name on the quiz!

#1. Perform the indicated operations on the given rational functions and simplify.

(a) \[ \frac{4}{x^2-9} - \frac{5}{x+3} \]

(b) \[ \frac{4}{x^2-9} \div \frac{5}{x+3} \]

There are problems on the other side of the page.
#2. Use polynomial long division to find $x^4 + 2x^2 - 1 \div x^2 + x - 2$.

#3. Solve for $t$ in the equation $\frac{2}{t} + \frac{3}{4} = \frac{7}{2t}$.