Class Practice on Polynomials #3

1. Divide $2x^2 + 5x - 3$ by $2x - 1$ \textbf{(Show work)}

(Write your answer in the form: \[ \frac{\text{Dividend}}{\text{Divisor}} = \text{Quotient} + \frac{\text{Remainder}}{\text{Divisor}} \])

2. Divide $3x^2 - 7x + 1$ by $x - 3$ \textbf{(Show work)}

(Write your answer in the form: \[ \frac{\text{Dividend}}{\text{Divisor}} = \text{Quotient} + \frac{\text{Remainder}}{\text{Divisor}} \])
Answers

1. Divide $2x^2 + 5x - 3$ by $2x - 1$  \textbf{(Show work)}

\[
\frac{2x^2 + 5x - 3}{2x - 1} = x + 3 + \frac{0}{2x - 1} = x + 3
\]

2. Divide $3x^2 - 7x + 1$ by $x - 3$  \textbf{(Show work)}

\[
\frac{3x^2 - 7x + 1}{x - 3} = 3x + 2 + \frac{7}{x - 3}
\]