Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. State the sum rule for derivatives (that is, what's the derivative of f(x) + g(x)?).

2. State the product rule for derivatives (that is, what's the derivative of $f(x) \times g(x)$?).

3. State the quotient rule for derivatives (that is, what's the derivative of $f(x) \div g(x)$?).