

① Expand the binomial:

$$(2x - y)^5 =$$

② What is the 3rd term of the expansion of $(3x + 2y)^9$?

③ Check to see if $f(x)$ & $g(x)$ are inverse functions by using composition functions. (ARE THEY INVERSE FUNCTIONS)

$$f(x) = 5x + 40 \quad \& \quad g(x) = \frac{1}{5}x - 8$$

⑥ Given $f(x) = 2x^2 - 3x + 1$

$$g(x) = 4x - 2$$

Simplify or Evaluate each:

a) $(f + g)(x) =$

b) $(g - f)(x) =$

c) $(fg)(x) =$

d) $(f \circ g)(x) =$

e) $(g \circ g)(x) =$

f) $(g \circ f)(2) =$

g) What is the domain of $(\frac{f}{g})(x)$?