GROUP WORK 3, SECTION 3.3

Back and Forth (Form A)

Compute the following derivatives. Write your answers at the bottom of this sheet, where indicated. When finished, fold the top of the page backward along the dotted line and hand to your partner.

$$1. f(x) = 5x^4 + \frac{3}{2}x^2 - 4$$

Do not simplify.

2.
$$g(x) = 2\sqrt{x} - 4\sqrt[4]{x}$$

3.
$$h(x) = (x^2 + 2x + 4)(x^3 - x - 3)$$

4.
$$j(x) = \frac{x^4 - 4x + 3}{\sqrt{x} + 1}$$

5.
$$k(x) = \frac{3}{\sqrt[3]{x}} + 42$$

Answers:

$$f'(x) =$$

$$g'(x) =$$

$$h'(x) =$$

$$j'(x) =$$

$$k'(x) =$$

GROUP WORK 3, SECTION 3.3

Back and Forth (Form B)

Compute the following derivatives. Write your answers at the bottom of this sheet, where indicated. When finished, fold the top of the page backward along the dotted line and hand to your partner.

Do not simplify.

1.
$$f(x) = -2x^3 + \frac{\sqrt{8}}{2}x^2 - 8$$

2.
$$g(x) = \frac{(x^3+1)(x^3+x)+6x^2}{5}$$

3.
$$h(x) = (x^3 + x^2 + 2x)(5x^2 - 2x^4 + 8x)$$

4.
$$j(x) = \frac{x^2 + x^3}{x}$$

5.
$$k(x) = \sqrt{11} - 22\sqrt[3]{x}$$

Answers:

$$f'(x) =$$

$$g'(x) =$$

$$h'(x) =$$

$$j'(x) =$$

$$k'(x) =$$