6. (5 points) There were 238 million bushels of wheat grown in Michigan in 1990 and the wheat sold for \$2.21 per bushel that year. In 1992, there were 242 million bushels grown, and wheat sold for \$2.00 per bushel in 1992.

(a) What was the revenue from wheat in Michigan in 1990?

$$\text{Rev in } 1990 = 238(2.21) = \$525.98 \text{ million}$$

In 1992?

$$\text{Rev in } 1992 = 242(2.00) = \$484 \text{ million}$$

(b) What was the average rate of change of the revenue from wheat over the period of time from 1990 to 1992?

$$\text{Avg Rate of Change of Rev. from } 1990-1992 = \frac{484 - 525.98}{2} = -20.99 \frac{\text{million dollars}}{\text{year}}$$

7. (5 points) A function f is known to have positive average rate of change on the interval from $x = 2$ to $x = 4$. Which of the following numbers are possible values for $f'(3)$? Circle all that apply.

(i) 3

(ii) 0

(iii) -2

all are possible

8. (9 points) Values of functions f and g are given in the following table. The function g is known to be invertible. Determine:

(a) $f(g(3))$ $= f(5) = 2$

(b) $f(f(3))$ $= f(4) = 6$

(c) $f(g^{-1}(3))$ $= f(2) = 7$

x	1	2	3	4	5
$f(x)$	0	7	4	6	2
$g(x)$	1	3	5	7	9