

HOMEWORK SET 1

MAT 092 · FALL 2008

You must show all work to get full credit. You can use a calculator to check your work.

Problem 1. Evaluate the following expressions.

a. $5 \cdot 2^2 \div 4 \cdot 2$

b. $\frac{3}{5} \div \frac{21}{10} \cdot 7 - 1 + 1 - 1 + 1$

c. $(-1)^{100} + (-1)^{21} - (-1)^{10,005}$

d. $-4\frac{5}{8} - (-3\frac{1}{6})$

Problem 2. American International Group, Inc. (AIG) is a holding company, and through its subsidiaries it engaged in a range of insurance and insurance-related activities in the US and 130 in countries. AIG's primary activities include general insurance, life insurance, and retirement services operations. Other significant activities include financial services and asset management.

AIG's stock was worth \$45.50 per share in February and in September when the federal government took over the company the stock was worth \$4.20 per share. You owned 1.5% of the company and there are 2.69 billion shares. How much money did you lose in the government buyout?

Problem 3. During a battle, an army retreated 1,500 meters, regrouped, and advanced 2,400 meters. The next day, it advanced another 1,250 meters. Find the army's net gain.

Problem 4. On February 1, Marta had \$1,704.29 in a checking account. During the month, she made deposits of \$713.87 and \$1,245.57, wrote checks for \$813.45, \$937.49, and \$1,532.79, and had a total of \$500 in ATM withdrawals. Find her checking account balance at the end of the month.

Date: September 21, 2008 *Due Date:* Friday, September 26, 2008.

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