

Word Problems for Final Exam SHOW WORK!!!

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the problem.

- 1) Assume the cost of a gallon of milk is \$3.10. With continuous compounding, find the time it would take the cost to be 4 times as much (to the nearest tenth of a year), at an annual inflation rate of 6%. 1) _____
- A) 8.5 years B) 0.0 years C) 0.1 years D) 23.1 years

Solve the linear programming problem.

- 2) The Acme Class Ring Company designs and sells two types of rings: the VIP and the SST. They can produce up to 24 rings each day using up to 60 total man-hours of labor. It takes 3 man-hours to make one VIP ring and 2 man-hours to make one SST ring. How many of each type of ring should be made daily to maximize the company's profit, if the profit on a VIP ring is \$40 and on an SST ring is \$35? 2) _____
- A) 12 VIP and 12 SST B) 18 VIP and 6 SST
C) 16 VIP and 8 SST D) 14 VIP and 10 SST