



Name _____ Class _____ Date _____

In your egg production facility, you need to purchase a new candling and sorting machine to sort your eggs more efficiently. A new machine will cost you \$25,000. You also have an opportunity to purchase a used machine from another facility that will also meet your needs. The used machine will cost \$15,000. Your wholesale price for eggs is \$0.08 per egg. You have been approved for a 10-year loan at a 3% annual percentage rate.

A. What is the total cost of the new machine?

B. What is the total cost of the used machine?

C. How many eggs would you have to produce to cover the cost of the new machine?

D. How many eggs would you have to produce to cover the cost of the used machine?

E. Which machine would you choose? Explain your answer.
