

Problem 60

X : annual cost of maintenance and repair

$$E(x) = 200$$

$$V(x) = 260$$

$$X^* = 1.2 \cdot X$$

Introduction of 20% tax

$$V(X^*) = V(1.2 \cdot X)$$

$$= (1.2)^2 \cdot V(x)$$

$$= (1.2)^2 (260)$$

$$= \underline{\underline{374.4}}$$

\square

$$V(aX) = a^2 \cdot V(x)$$