Simulations: Random Variables

A manufacturer who makes tables estimates that one out of every 10 tables is faulty. The manufacturer makes AED 60 per working table and loses AED 250 for every faulty table manufactured.

What is the expected value $E(X)$ of the profit made per table?

Enter your answer in the space provided.

$E(X) =$

An investor of a start-up company believes it has a 35% chance of making AED 3,000, a 25% chance of making AED 1,000, a 10% chance of making nothing, and a 30% chance of losing AED 2,000. What is the expected value of this start-up company?

Drag and drop your answer to correctly complete the sentence.

The expected value of this investment is AED .

A manufacturer of televisions estimates that 10% of televisions that they produce are faulty and must be thrown away. A television costs AED 600 to produce and can be sold for AED 750. A table of the expected profits is shown below.

Probability	Outcome
90%	AED 150
10%	-AED 600

A spinner like the one shown may be used to estimate the situation.

The spinner is spun 40 times and the results recorded in a frequency table.

Outcome	Frequency
Working TV	38
Faulty TV	2

Drag and drop your answer to correctly complete the sentence.

The average value is .

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