Need Assistance with a Problem

|  |  |
| --- | --- |
| Dogs | Households |
| 0 | 1327 |
| 1 | 402 |
| 2 | 162 |
| 3 | 47 |
| 4 | 28 |
| 5 | 11 |

**(a)**

Use a frequency distribution to construct a probability distribution

|  |  |
| --- | --- |
| x | P(x) |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

**Round to the nearest Thousandth as needed**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Dogs | 0 | 1 | 2 | 3 | 4 | 5 |
| Households | 1327 | 402 | 162 | 47 | 28 | 11 |

(b) **Find the mean of the probability distribution**

U = (Round to nearest **tenth** as needed)

c. **Find the variance of the probability distribution.**

Variance = (Round to nearest **tenth** as needed)

d**. Find the standard deviation of probability distribution**.

Standard deviation = (Round to nearest **tenth** as needed)

e. **Interpret the results of the context of the real-life situation**

***(Choose One)***

1. A household on average has 0.8 dog with a standard deviation of 0.9 dog
2. A household on average has 0.5 dog with a standard deviation of 0.9 dog
3. A household on average has 0.5 dog with a standard deviation of 11 dog
4. A household on average has 0.9 dog with a standard deviation of 0.5 dog