

Probability of independent events: Decimal answers

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At a factory that produces pistons for cars, Machine 1 produced 711 satisfactory pistons and 79 unsatisfactory pistons today. Machine 2 produced 584 satisfactory pistons and 216 unsatisfactory pistons today. Suppose that one piston from Machine 1 and one piston from Machine 2 are chosen at random from today's batch. What is the probability that the piston chosen from Machine 1 is unsatisfactory and the piston chosen from Machine 2 is satisfactory?

Do not round your answer.

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$$\begin{array}{r}
 \text{Machine 1} \\
 711 \text{ S} \\
 79 \text{ US} \\
 \hline
 790 \text{ total}
 \end{array}
 \quad
 \begin{array}{r}
 \text{Machine 2} \\
 584 \text{ S} \\
 216 \text{ US} \\
 \hline
 800 \text{ total}
 \end{array}$$

$$\frac{79}{790} \cdot \frac{584}{800} =$$

What is the probability?