

MATH 533 WEEK 2 QUIZ

If  $X = \{1, 2, 4, 8, 9, 10, 16\}$  and  $Y = \{3, 4, 7, 9, 15\}$ , then  $X \cap Y$  is \_\_\_\_\_.

- {1, 3, 6, 7}
- {4, 9}
- {3, 6, 7, 9}
- {3, 4, 9}
- {3, 4, 7, 9}

If the occurrence of one event precludes the occurrence of another other event, then the two events are \_\_\_\_\_.

- non interacting
- joint events
- mutually exclusive
- collectively exhaustive
- independent

A listing of all elementary outcomes (i.e. the outcomes which cannot be broken down into other events) of an experiment (i.e. a decision making situation under uncertainty) is called a \_\_\_\_\_.

- probability space
- population
- sample space
- distribution

The probability that an event, Event A, occurs is 0.70. The probability of another event, Event B, occurs 0.67. The probability of both A and B occur is 0.50. The probability that either Event A or Event B occurs is \_\_\_\_\_.

- None of these answers are correct
- 0.53
- 0.87