



Name: _____

Date: _____

Section: ☐ Mon/Wed ☐ Tue/Thu

1.

(6 Points)

An airline records whether 200 flights departed on time or were delayed.

	On Time	Delayed	Total
Morning	70	30	100
Evening	90	10	100
Total	160	40	200

Suppose one flight is selected at random.

A. What is the probability that the flight departed in the morning *or* was delayed? Show your calculation.

• Answer: _____

B. Given that the flight was delayed, what is the probability that it departed in the morning? Show your calculation.

• Answer: _____

C. Are “morning” and “delayed” mutually exclusive events? Explain using the table.

• Answer: _____

2.

(4 Points)

Suppose each of two independent flights has a 20% probability of being delayed. What is the probability that *at least one* flight is delayed? Show how you used the complement to find your answer.

• Answer: _____

Score: _____ / 10