CONCORDIA COLLEGE
MOORHEAD, MINNESOTA

Name: _____

Date: _____

Section: ○ Mon/Wed ○ Tue/Thu

1. **(6 Points)**

Let X be the number of flights canceled at an airport on a given day. The probability distribution of X is shown below.

Number of cancellations (x)	0	1	2	3
Probability $P(X = x)$	0.20	0.40	?	0.10

A. Find the missing probability. Show your calculation.

- Answer: _____

B. Calculate the expected number of cancellations per day. Show your calculation.

- Answer: _____

2. **(4 Points)**

Use your answer to Question 1.B.

A. Explain what the expected number of cancellations means in this setting.

- Answer: _____

B. Could the airport have exactly the expected number of cancellations on a single day? Explain.

- Answer: _____

Score: _____ / 10