Info for questions 1-5

Kristen Gilbert is a former nurse and convicted serial killer. The table below shows when she was on shift (i.e., working at the hospital) or not, and whether patients died or not during the shift.

	Gilbert on shift	Gilbert not on shift
Patient died during the shift	40	34
No patient died during the shift	217	1384

Denote A by "Patient died during shift" and B by "Gilbert was on shift". Based on this table, please find the following probabilities. **Please express them as numbers, not percentages, and use three decimal places.**

1 1 point

What is P(A, B)?

Type your answer...

2 1 point

What is P(A)?

Type your answer...

3 1 point

What is P(B)?

Type your answer...

4 1 point

What is P(A | B)?

Type your answer...

5 1 point

What is P(B | A)?

Type your answer...

6 5 points

Suppose cookie packs contain either 2 oatmeal cookies, 1 oatmeal cookie and 1 chocolate chip cookie, or 2 chocolate chip cookies. The packages are produced in proportions of 0.1, 0.6, and 0.3, respectively.

The information is summarized in the following table:

Prior	# Oatmeal Cookies	# Chocolate Chip Cookies
0.1	2	0
0.6	1	1
0.3	0	2

Suppose you have a package and the first cookie you pull out is an oatmeal cookie.

What is the posterior probability that the package originally contained one oatmeal and one chocolate chip cookie? Please write you answer as a number, not a percentage, and use 3 decimal places.

Type your answer...