Lab 3

Duke STA 240 Fall 2025

replace this text with your name

In what follows, you may find some notation useful. Let D denote your true disease status, and T denote the result of your test. Then

$$
\begin{aligned}
p &= P(D = +) \\
f_- &= P(T = -|D = +) \\
f_+ &= P(T = +|D = -) \\
1 - f_- &= P(T = +|D = +) \\
1 - f_+ &= P(T = -|D = -).
\end{aligned}
$$

Task 1

You can write text here.

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# You can add code here
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You can type math here:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}.$$

Task 2

You can write text here.

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# You can add code here
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You can type math here:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}.$$

Task 3

You can write text here.

```
# You can add code here
```

You can type math here:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}.$$

Task 4

You can write text here.

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# You can add code here
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You can type math here:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}.$$

Task 5

You can write text here.

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You can type math here:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}.$$