

1. Basic

A	B	A && B	A    B
T	T		
T	F		
F	T		
F	F		

2. Adding not:

A	B	!A	!A && B	A    B	!(A    B)

Always fill in the A and B columns like I did on the first one. That's how you start these problems. (If you prefer using 1s and 0s over Ts and Fs, that's fine, the form is what matters.)

3. Test the variable, **value**. If it is between 23 and 78 inclusive, print "yes". Use only one if statement.

```
int value = /* Code not shown sets value to a valid integer */
```

4. Mixing it up: make a truth table for  $(!A || B) \&\& !B$

A	B	!A	!B	!A    B	(!A    B) && !B

5. Fill out this truth table then choose the best answer below:

A	B	!B	A    !B	A && B	(A&&B)    !B	(A    !B) && ((A&&B)    !B)

Which statement is true about the above truth table?

- a. the final column is false when A and B are the same.
- b. the final column is true when A and B are the same.