What’s that Smell? Oh, it’s Potpourri! (2 pts for 1-6, we drop lowest one)

Fill in the correct circles & squares completely…like this: ● (select ONE) ■ (select ALL that apply)

Question 1: Which of the following is a true statement regarding Abstraction? (select ONE)
○ A person from 1920 could still easily start today’s car thanks to abstraction.
○ Someone who hires someone to steal a neighbor’s pool and puts it in their backyard, and tells them exactly how to move the pool and how to install it, by providing a ton of details that help the thief is using abstraction.
○ The Apple power brick that supports different plugs for different countries is an example of detail removal.
○ Recipe authors who write “For a milkshake: blend ice cream, milk, vanilla and <fruit>” use generalization.
○ None of the Above.

Question 2: What is $100_2 + 11_{10}$? (select ONE)

<table>
<thead>
<tr>
<th></th>
<th>A₁₆</th>
<th>B₁₆</th>
<th>C₁₆</th>
<th>D₁₆</th>
<th>E₁₆</th>
<th>F₁₆</th>
<th>G₁₆</th>
<th>H₁₆</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

Question 3: What does Mystery 200 5 report? (fill in the blank)

Question 3: What does Mystery 201 5 report? (fill in the blank)
**Question 4:** What is the *Domain* and *Range* of *Foo*? The expression does not cause an error. (select ONE)

(The Domain of Foo is a...)

- [ ] number
- [ ] word
- [ ] sentence
- [ ] letter
- [ ] character

(The Range of Foo is a...)

- [ ] number
- [ ] word
- [ ] sentence
- [ ] letter
- [ ] character

(The block here is used for Questions 5 & 6)

**Question 5:** If \( A \) and \( B \) are Booleans, and the output from *Test* is false, which can you say for sure? (select ALL that apply)

- [ ] \( A \) must be true
- [ ] \( B \) must be true
- [ ] \( A \) must be false
- [ ] \( B \) must be false
- [ ] None of these

**Question 6:** Which of the following is equivalent to the original *Test* block? (select ONE)

- [ ] Test \( A \) \( B \)
  
  report \( A \) or \( B \)

- [ ] Test \( A \) \( B \)
  
  report \( A \) or \( \text{not} \ B \)

- [ ] Test \( A \) \( B \)
  
  report \( \text{not} \ A \) or \( B \)

- [ ] Test \( A \) \( B \)
  
  report \( \text{not} \ A \) or \( \text{not} \ B \)

- [ ] None of these
**Question 7: Now line up for the assembly…** (6 pts)
This script is intended to take three distinct numbers and return a list of three numbers, where the smallest number will be listed first, the middle number second, and the largest last. What do we know for sure? (select ONE per row)

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</thead>
<tbody>
<tr>
<td>a) The first number (small) is the smallest number among A, B and C</td>
<td>yes ○ ○ no</td>
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<tr>
<td>b) The second number (medium) is the middle number among A, B and C</td>
<td>yes ○ no</td>
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<tr>
<td>c) The third number (large) is the largest number of A, B and C</td>
<td>yes ○ no</td>
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</tbody>
</table>

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**Question 8: I command you to change!!…** (4 pts)
What gets said if I run the script below? The variable **global** is a global variable. (fill in the blank)
You did it! Congratulations!

Question: My favorite "Friends™" episode? The one with the Higher-Order Functions! (5 pts)

is a list of your friends with all the information you'd need about them to answer the queries below (e.g., it has their names, their phone number, address, family information, how much they owe you, etc.).

Thankfully, you don't need to know how we actually store the data for each friend (e.g., a database, a sublist of data items, etc.).

The queries:
(a) Who is the oldest friend?
(b) What are the zip codes of friends who sent you holiday cards last year?
(c) Who are the friends who both owe you money AND have rich parents they can borrow from to pay you back?
(d) Given the phone number of every friend, what are the costs of an hour phone call to each, converted to Euros?
(e) What are all their zip codes that are palindromes (i.e., the same forward as backwards, like 98298)?

Select ONE row. (Hint: None of these are used twice...)

Can't be done with any of the expressions on the left, any of the expressions can be done with:

Hint: None of these are used twice...