1) How many objects are in this object tree?

![Object Tree Diagram]

a. 5  
b. 8  
c. 9  
d. 0  
e. 4

2) What is the following an example of?

- `spiderRobot move forward 1 meter`  

a. Executing a method  
b. Changing a field  
c. Executing a function  
d. Changing a variable  
e. Creating an object

3) What is the following an example of?

- `3D Text set isShowing to false`  

a. Executing a method  
b. Changing a field  
c. Executing a function  
d. Changing a variable  
e. Creating an object
4) How many objects can you make from a class in Alice?
   a. None
   b. 1
   c. 20
   d. 100
   e. As many as you want

5) What is the following an example of?

   ![Image of Cow](image1)

   a. Executing a method
   b. Setting a property
   c. Executing a function
   d. Changing a variable
   e. Creating an object

6) In the following method which object will turn around 180 degrees?

   ![Code for method](image2)

   a. bunny
   b. cow
   c. horse
   d. bunny2
   e. bunny3
7) Which two things will happen at the same time?

<table>
<thead>
<tr>
<th>Horse</th>
<th>Say Good Morning</th>
<th>More...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do together</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bunny</td>
<td>Say Hello</td>
<td>More...</td>
</tr>
<tr>
<td>Cow</td>
<td>Walk times = 1</td>
<td>Speed = 1</td>
</tr>
<tr>
<td>Bunny2</td>
<td>Turn left</td>
<td>0.5 revolutions</td>
</tr>
<tr>
<td>Bunny3</td>
<td>Turn right</td>
<td>1 revolution</td>
</tr>
</tbody>
</table>

- a. The horse will say "Good Morning" and the bunny will say "Hello".
- b. The bunny will say "Hello" and the cow will walk one time
- c. The Cow will walk 1 time and bunny2 will turn half way around
- d. The bunny2 will turn half way around and bunny3 will turn all the way around
- e. The horse will say "Good Morning" and bunny3 will turn all the way around

8) What will happen with the horse is 3 meters away from bunny2 when the following executes?

| If horse is within 1 meter of bunny2 |
| Horse  | Say Good Morning  | More... |
| Else |
| Horse  | Move amount = 1 meter toward target = bunny2 | More... |

- a. The horse will say "Good Morning".
- b. The horse will move away from bunny2
- c. The horse will move forward in the direction it is facing
- d. The horse will move toward bunny2
- e. The horse won't do anything

9) How many times will bunny2 turn and cow walk when the following code executes?

| Loop 5 times times show complicated version |
| Bunny2 | Turn left 0.5 revolutions | More... |
| Loop 2 times times show complicated version |
| Cow walk times = 1 speed = 1 |
| Bunny3 | Turn right 1 revolution | More... |
a. Bunny2 will turn one time and cow will walk one time  
b. Bunny2 will turn 5 times and cow will walk 2 times  
c. Bunny2 will turn 10 times and cow will walk 2 times  
d. Bunny2 will turn 5 times and cow will walk 10 times  
e. Bunny2 will turn 6 times and cow will walk 10 times  

10) If the cow starts out 11 meters away from bunny2 how many times will the cow walk when the following executes if each time the cow walks it moves 1 meter?  

- While  
  cow is at least 2 meters away from bunny2  
  cow.walkTowards target = bunny2 times = 1 speed = 1  
- bunny2 turn right 1 revolution more...  

a. Cow will walk 1 time  
b. Cow will walk 10 times  
c. Cow will walk 11 times  
d. Cow will walk 9 times  
e. Cow will walk 8 times