Functions Quiz (Practice, Version B)

Name: _____ Period: _____ Date: _____

Practice version. 10 questions, 10 points, 15 minutes. Choose the single best answer unless a question says to select two. Code labeled **App Lab** is JavaScript; all other code is AP pseudocode (Exam Reference Sheet). When a program prints more than one line, the lines are listed in order, separated by spaces.

1. App Lab. What does `"title"` show after this program runs?

```
function playIntro() {
  setText("title", "Ready?");
}
setText("title", "Game Over");
```

(A) `Game Over`
(B) `Ready?`
(C) `Game OverReady?`
(D) Nothing is shown.

2. App Lab. What is printed to the console?

```
function cat() {
  console.log("cat");
}
function dog() {
  cat();
  console.log("dog");
}
cat();
dog();
```

(A) `cat dog`
(B) `dog cat cat`
(C) `cat dog cat`
(D) `cat cat dog`

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3. App Lab. The user clicks `"twoBtn"` once and then clicks `"oneBtn"` once. What does `"starLabel"` show at the end?

```
var stars = 1;
function addStars() {
  stars = stars + 2;
  setText("starLabel", stars);
}
onEvent("oneBtn", "click", function() {
  addStars();
});
onEvent("twoBtn", "click", function() {
  addStars();
  addStars();
});
```

(A) 7
(B) 5
(C) 3
(D) 9

4. App Lab. Which line of this program begins the *definition* of the function `startOver`?

```
1 var lives = 0;
2 onEvent("startBtn", "click", function() {
3   startOver();
4 });
5 function startOver() {
6   lives = 3;
7   setScreen("gameScreen");
8 }
```

(A) Line 2
(B) Line 3
(C) Line 5
(D) Line 6

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5. App Lab. What is printed to the console?

```
var coins = 5;
function doubleIt() {
  coins = coins * 2;
}
function spend() {
  coins = coins - 2;
}
spend();
doubleIt();
spend();
console.log(coins);
```

(A) 6
(B) 4
(C) 8
(D) 1

6. What is displayed as a result of executing the program?

```
PROCEDURE cheer()
{
   DISPLAY("go")
}
DISPLAY("ready")
cheer()
DISPLAY("set")
cheer()
```

(A) ready set go
(B) go ready set go
(C) ready go set
(D) ready go set go

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7. What is displayed as a result of executing the program?

```
n ← 5
PROCEDURE takeTwo()
{
   n ← n - 2
}
PROCEDURE double()
{
   n ← n * 2
}
double()
takeTwo()
double()
DISPLAY(n)
```

(A) 16
(B) 12
(C) 18
(D) 8

8. App Lab. A game has these same three lines in three different places:

```
setScreen("endScreen");
playSound("gameover.mp3");
setText("finalLabel", "Game Over!");
```

Which change best improves the program?

(A) Delete two of the three copies so the code is shorter.
(B) Put all three lines inside one `onEvent` for a button.
(C) Put the three lines in a function named `endGame` and call `endGame();` in each of the three places.
(D) Change `"endScreen"` to a shorter screen ID.

9. Which of the following are benefits of using functions in a program?

(Select two answers.)

(A) If the steps need to change, the change is made in one place instead of every copy.
(B) Functions run automatically when the program starts, even if they are never called.
(C) Functions make a program use no variables.
(D) A programmer can use a function by its name without knowing every detail of how it works (abstraction).

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10. App Lab. Clicking `"scoreBtn"` does not update `"scoreLabel"`. What is the problem?

```
function showScore() {
  setText("scoreLabel", "Score: 10");
}
onEvent("scoreBtn", "click", function() {
  showscore();
});
```

(A) The function must be defined below the `onEvent`.

(B) `setText` cannot be used inside a function.

(C) The call says `showscore`, but the function is named `showScore`. Names are case-sensitive.

(D) A function cannot be called from inside an `onEvent`.

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