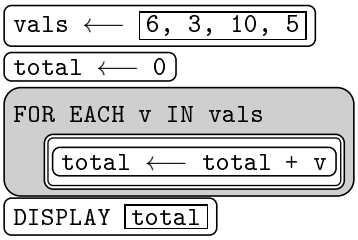
Traversals Quiz (Practice, Version B)

Name: _____ Period: _____ Date: _____

Practice version. 10 questions, 10 points, 15 minutes. Choose the single best answer. Code labeled **App Lab** is JavaScript, where list indexes start at **0**. All other code is AP pseudocode (Exam Reference Sheet), where list indexes start at **1**. When a program prints more than one line, the lines are listed in order, separated by spaces.

1. What is displayed as a result of executing the code segment?



(A) 24
(B) 10
(C) 4
(D) 18

2. What is displayed as a result of executing the code segment?

```
grades ← [45, 50, 72, 38, 50]
count ← 0
FOR EACH g IN grades
{
   IF (g < 50)
   {
      count ← count + 1
   }
}
DISPLAY(count)
```

(A) 4
(B) 3
(C) 1
(D) 2

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3. The following code segment is intended to set `min` to the smallest value in the list `list`.

```
min ← 0
FOR EACH v IN list
{
    IF (v < min)
    {
        min ← v
    }
}
```

For which of the following lists does the code segment *not* work as intended?

(A) `[-3, 5, 1]`
(B) `[4, 9, 6]`
(C) `[0, 2, 8]`
(D) `[-7, -1, -9]`

4. What is displayed as a result of executing the code segment?

```
result ← []
FOR EACH n IN [15, 4, 22, 10, 7]
{
    IF (n > 10)
    {
        APPEND(result, n)
    }
}
DISPLAY(result)
```

(A) `[15, 22, 10]`
(B) `[4, 10, 7]`
(C) `[15, 22]`
(D) `[22, 15]`

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5. What is displayed as a result of executing the code segment?

```
list ← [1, 3, 5, 7, 9]
i ← 2
sum ← 0
REPEAT UNTIL (i > LENGTH(list))
{
    sum ← sum + list[i]
    i ← i + 2
}
DISPLAY(sum)
```

(A) 25
(B) 15
(C) 12
(D) 10

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

```
var times = [30, 45, 60];
var total = 0;
for (var i = 0; i < times.length; i++) {
  total = total + times[i];
}
console.log(total / times.length);
```

(A) 135
(B) 45
(C) 60
(D) 67.5

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

```
var pets = ["cat", "dog", "fish"];
for (var i = 0; i <= pets.length; i++) {
  console.log(pets[i]);
}
```

(A) cat dog fish undefined
(B) cat dog fish
(C) dog fish
(D) cat dog

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

```
var ages = [15, 21, 17, 30, 18];
var adults = [];
for (var i = 0; i < ages.length; i++) {
  if (ages[i] >= 18) {
    appendItem(adults, ages[i]);
  }
}
console.log(adults);
```

(A) [21, 30]

(B) [15, 17]

(C) [18, 21, 30]

(D) [21, 30, 18]

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

```
var words = ["sun", "sky", "sea", "sky"];
var found = -1;
for (var i = 0; i < words.length; i++) {
  if (words[i] == "sky" && found == -1) {
    found = i;
  }
}
console.log(found);
```

(A) 1

(B) 3

(C) 2

(D) 4

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10. App Lab. A program imports the table `"Animals"` shown below.

Name	Speed
Cheetah	110
Horse	88
Rabbit	56
Lion	80
Elephant	40

What is printed to the console?

```
var names = getColumn("Animals", "Name");
var speeds = getColumn("Animals", "Speed");
var fast = [];
for (var i = 0; i < names.length; i++) {
  if (speeds[i] > 75) {
    appendItem(fast, names[i]);
  }
}
console.log(fast);
```

(A) `["Rabbit", "Elephant"]`

(B) `["Cheetah"]`

(C) `["Cheetah", "Horse", "Lion"]`

(D) `[110, 88, 80]`

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