List Traversals — Practice Quiz

Name: _____ Period: _____ Date: _____

Choose the best answer. All code is AP pseudocode (lists are 1-indexed).

1. What is displayed?

```
nums ← [4, 9, 1, 6]
max ← nums[1]
FOR EACH n IN nums
{
  IF (n > max) { max ← n }
}
DISPLAY(max)
```

(A) 9
(B) 6
(C) 1
(D) 4

2. What is displayed?

```
temps ← [80, 62, 91, 75, 88]
count ← 0
FOR EACH t IN temps
{
  IF (t > 85) { count ← count + 1 }
}
DISPLAY(count)
```

(A) 5
(B) 2
(C) 3
(D) 1

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3. What is displayed?

```
scores ← [70, 85, 90, 60]
total ← 0
FOR EACH s IN scores
{
  total ← total + s
}
DISPLAY(total / LENGTH(scores))
```

(A) 90

(B) 305

(C) 76.25

(D) 70

4. What is displayed?

```
words ← ["hi", "bye", "ok", "yes", "no"]
count ← 0
FOR EACH w IN words
{
  IF (LENGTH(w) = 2) { count ← count + 1 }
}
DISPLAY(count)
```

(A) 3

(B) 5

(C) 4

(D) 2

5. What is displayed?

```
vals ← [3, -1, 7, -4, 2]
min ← vals[1]
FOR EACH v IN vals
{
  IF (v < min) { min ← v }
}
DISPLAY(min)
```

(A) -1

(B) -4

(C) 3

(D) 2

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6. A program needs to determine whether any element in a list equals a target value. Which approach is correct?

(A) Check only the first element and stop
(B) Check only the last element and stop
(C) Return true before examining any elements
(D) Traverse the list and set a flag when a match is found

7. What is displayed?

```
data ← [10, 20, 30, 40]
result ← 0
FOR EACH d IN data
{
  IF (d MOD 20 = 0) { result ← result + d }
}
DISPLAY(result)
```

(A) 100
(B) 60
(C) 30
(D) 10

8. What is displayed?

```
items ← [5, 12, 8, 3, 15]
big ← []
FOR EACH x IN items
{
  IF (x > 10) { APPEND(big, x) }
}
DISPLAY(LENGTH(big))
```

(A) 3
(B) 5
(C) 1
(D) 2

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9. What is displayed?

```
grades ← [88, 92, 76, 95, 81]
pass ← 0
FOR EACH g IN grades
{
  IF (g ≥ 80) { pass ← pass + 1 }
}
DISPLAY(pass)
```

(A) 5

(B) 3

(C) 4

(D) 2

10. A student writes this code to find the sum of even numbers in a list. What is displayed when `nums ← [1, 4, 7, 2, 9]`?

```
nums ← [1, 4, 7, 2, 9]
total ← 0
FOR EACH n IN nums
{
  IF (n MOD 2 = 0) { total ← total + n }
}
DISPLAY(total)
```

(A) 6

(B) 2

(C) 23

(D) 4

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