Medium-Level Pseudocode MCQs – Arithmetic Operators

Assume integer division (floor) and 32-bit two's-complement wrap-around.

1.

```
a ← 12
b ← 5
c ← a / b * b
print a - c
```

A. 0

B. 1

C. 2

D. 3

2.

```
x ← 7
y ← 3
x ← x + y
y ← x - y
x ← x - y
print x * y
```

A. 21

B. 10

C. 14

D. 12

3.

```
n ← 20
sum ← 0
while n > 0 do
    sum ← sum + n
    n ← n - 2
end while
print sum
```

A. 110

B. 100

C. 90

D. 80

4.

```
p ← 2
q ← 8
p ← p * q
q ← p / q
print p + q
```

A. 16

B. 18

C. 20

D. 22

5.

```
m ← 100
m ← m - (m % 7) + 7
print m
```

A. 105

B. 102

C. 100

D. 98

6.

```
a ← 9
b ← 4
c ← (a + b) / 2 * 2
print c
```

A. 12

B. 13

C. 14

D. 15

7.

```
k ← 5
ans ← 1
for i ← 1 to k do
ans ← ans * 2
end for
ans ← ans - 1
print ans
```

A. 31

B. 32

C. 63

D. 64

8.

```
base ← 3
power ← 4
result ← 1
for i ← 1 to power do
    result ← result * base
end for
print result
```

A. 12

B. 27

C. 64

D. 81

9.

```
x ← 50
x ← x + (x / 10)
x ← x - (x % 10)
print x
```

A. 50

B. 55

C. 60

D. 45

10.

```
a ← 15
b ← 6
c ← a % b
d ← (a - c) / b
print c + d
```

A. 5

B. 6

C. 7

D. 8

Answers

1 C

2 A

3 A

4 B

5 A

6 B

7 A

8 D

9 B

10 C