Chapter 3 Quiz

- Due Jun 25 at 11:59pm
- Points 20
- Questions 20
- Available after Jun 21 at 12am
- Time Limit 30 Minutes
- Allowed Attempts 2

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	18 minutes	18 out of 20

ⓘ Correct answers are hidden.

Score for this attempt: 18 out of 20
Submitted Jun 21 at 8:54pm
This attempt took 18 minutes.

Question 1
1 / 1 pts

If the input is 12, what is the final value for numItems?

```
int x;
int numItems = 0;
x = scnr.nextInt();
if (x <= 12) {
   numItems = 100;
}
else {
   numItems = 200;
}
numItems = numItems + 1;
```

- 100
- 101

- 200
- 201

IncorrectQuestion 2

0 / 1 pts

If the input is 5, what is the output?

```
int x;
int z = 0;
x = scnr.nextInt();
if (x > 9)
   z = 3;
   z = z + 1;
System.out.print(z);
```

- 1
- 0
- 4
- 3

Question 3

1 / 1 pts

What is the final value of y?

```
int x = 6;
int y = 2;
if (x < 10) {
   if (y < 5) {
      y = y + 1;
   }
   else {
      y = 7;
   }
}
else {
```

```
   y = y + 10;
}
```

- 7
- 3
- 12
- 13

Question 4
1 / 1 pts

Which expression for YYY outputs "Quarter century!" when the input is 25?

```
int x;
x = scnr.nextInt();
if (YYY) {
   System.out.println("Nothing special");
}
else {
   System.out.println("Quarter century!");
}
```

- x == 25
- x <> 25
- x == !25
- x != 25

Question 5
1 / 1 pts

Which expressions for XXX and YYY correctly output the text for pre-teen and teenager? Choices are in the form XXX / YYY.

```
if (XXX) {
   // Output "Pre-teen"
}
else if (YYY) {
   // Output  "Teenager"
```

```
}
```

- age >= 13 / age <= 19
- age <= 13 / age > 13
- age <13 / age <= 19
- age < 13 / age < 19

Incorrect

Question 6

0 / 1 pts

Which expression for XXX outputs "Modern era" for any year 1980 and later?

```
if (year < 2000) {
   // Output "Past"
}
else if (XXX) {
   // Output "Modern era"
}
```

- year >= 1980
- year > 1980
- (No such expression exists)
- year >= 2000

Question 7

1 / 1 pts

What value of x outputs "Junior"?

```
if (x < 56) {
   // Output "Sophomore"
}
else if (x > 56) {
   // Output "Senior"
}
else {
   // Output "Junior"
```

```
}
```

- No such value
- Values 57 or larger
- Value 56
- Values 55 or 57

Question 8

1 / 1 pts

A restaurant gives a discount for children under 10. They also give the discount for adults over 55. Which expression evaluates to true if a discount should be given?

- (age >= 10) && (age <= 55)
- (age < 10) || (age > 55)
- (age >= 10) || (age <= 55)
- (age < 10) && (age > 55)

Question 9

1 / 1 pts

Both must be true for a person to ride: (1) At least 5 years old, (2) Taller than 36 inches. Which expression evaluates to true if a person can ride?

- (age >= 5) && (height > 36)
- (age > 5) && (height <= 36)
- (age > 5) || (height <= 36)
- (age >= 5) || (height > 36)

Question 10

1 / 1 pts

Which expression evaluates to false if x is 0 and y is 10?

- (x == 0) || (y == 10)
- (x == 0) && (y == 10)
- (x == 0) && (y == 20)
- (x == 0) || (y == 20)

Question 11

1 / 1 pts

To quit, a user types 'q'. To continue, a user types any other key. Which expression evaluates to true if a user should continue?

- (!key) == 'q'
- key == (!'q')
- !(key == 'q')
- key == 'q'

Question 12

1 / 1 pts

Which expression for YYY correctly outputs that x is between 50-100?

```
if (YYY) {
   // Output "50, 51, ..., 99, 100"
}
```

- 50 <= x <= 100
- (x >= 50) || (x <= 100)
- 50 >= x <= 100
- (x >= 50) && (x <= 100)

Question 13

1 / 1 pts

Which expression correctly evaluates 13 < num < 30?

- <pre><code>(num > 13) || (num < 30)</code></pre>
- <pre><code>(num > 13) && (num < 30)</code></pre>
- <pre><code>(num < 13) && (num < 30)</code></pre>
- <pre><code>(num < 13) || (num < 30)</code></pre>

Question 14

1 / 1 pts

What is the output for x = 15?

```
switch (x) {
   case 10:
      // Output: "First "
```

```
      break;
   case 20:
      // Output: "Second "
      break;
   default:
      // Output: "No match "
      break;
}
```

- No match
- First Second
- Second
- First

Question 15

1 / 1 pts

For what values of x does the default case execute in the code below? x is declared as an integer.

```
switch (x) {
   case 2:
      ...
      break;
   case 3:
      ...
      break;
   case 4:
      ...
      break;
   default:
      ... // When does this execute?
}
```

- Only for values that are not 2, 3, or 4
- Only for all values greater than 4
- For any value

- Only for value 5

Question 16

1 / 1 pts

If the input sets int x with 5 and int y with 7, what is the ending value of z? z is declared as a boolean.

```
z = (x > y);
```

- Error: No value assigned to z due to a syntax error
- True
- False
- Error: No value assigned to z due to a runtime error

Question 17

1 / 1 pts

Which if branch executes when an account lacks funds and has not been used recently? hasFunds and recentlyUsed are booleans and have their intuitive meanings.

- <pre><code>if (!hasFunds && recentlyUsed)</code></pre>
- <pre><code>if (!hasFunds && !recentlyUsed)</code></pre>
- <pre><code>if (hasFunds && !recentlyUsed)</code></pre>
- <pre><code>if (hasFunds && recentlyUsed)</code></pre>

Question 18

1 / 1 pts

What is the ending value of y if x is 50? y and x are ints.

```
y = (x < 21) ? 100 : x;
```

- 'x'
- 100
- 21
- 50

Question 19

1 / 1 pts

A restaurant serves breakfast before 11 am, after which they serve lunch. Which expression for XXX outputs the correct string for any time? Variable time ranges from 0 to 23 (e.g., 13 means 1 pm).

```
mealString = XXX;

// Output mealString
```

- `(time == 11) ? "Breakfast" : "Lunch"`
- `(time > 11) ? "Breakfast" : "Lunch"`
- `(time < 11) ? "Breakfast" : "Lunch"`
- `(time != 11) ? "Breakfast" : "Lunch"`

Question 20

1 / 1 pts

Which value of y results in short circuit evaluation, causing z == 99 to not be evaluated?

```
(y > 50) || (z == 99)
```

- No such value
- 40
- 50
- 60

Quiz Score: 18 out of 20