✓ **Congratulations! You passed!**
TO PASS 80% or higher

[Keep Learning]

GRADE
100%

Variables and Expressions

TOTAL POINTS 4

1. For the following statements:

`1 / 1 point`

```
1    int x;
2    int y = x;
```

Which one of the following best describes the error?

- ⦿ The uninitialized variable x is used.
- ○ 'x' is not a valid identifier.
- ○ Variable y is not declared.
- ○ The uninitialized variable y is used.

✓ **Correct**

2. For the following statements:

`1 / 1 point`

```
1    int a1 = 2;
2    3 = a1;
```

Which one of the following best describes the error?

- ○ 'a1' is not a valid identifier.
- ○ The uninitialized variable a1 is used.
- ⦿ '3' is not an lvalue.
- ○ The variable a1 is already assigned the value 2.

✓ **Correct**

3. For the following statements:

`1 / 1 point`

```
1    int x = 3;
2    int y;
3    int z = x + 2 * 4;
```

Which one of the following correctly depicts the state of the program after these statements are executed?

- ○ Conceptual drawing:

x	3
y	
z	11

The image above shows three horizontal boxes. The top box shows an "x" on the left and a "3" on the right. The middle box shows a "y" on the left and nothing on the right. The bottom box shows a "z" on the left and an "11" on the right.

- ⦿ Conceptual drawing:

x	3
y	?
z	11

The image above shows three horizontal boxes. The top box shows an "x" on the left and a "3" on the right. The middle box shows a "y" on the left and a "?" on the right. The bottom box shows a "z" on the left and an "11" on the right.

- ○ Conceptual drawing:

x	3

y	
z	20

The image above shows three horizontal boxes. The top box shows an "x" on the left and a "3" on the right. The middle box shows a "y" on the left and nothing on the right. The bottom box shows a "z" on the left and a "20" on the right.

○ Conceptual drawing:

x	3
y	?
z	20

The image above shows three horizontal boxes. The top box shows an "x" on the left and a "3" on the right. The middle box shows a "y" on the left and a "?" on the right. The bottom box shows a "z" on the left and a "20" on the right.

✓ **Correct**

4. For the following statements:

```
1    int a;
2    int b;
3    a = 5;
4    b = a % 2 - (a + 1) / 2;
```

Which one of the following correctly depicts the state of the program after these statements are executed?

○ Conceptual drawing:

a	5
b	-0.5

The image above shows two horizontal boxes. The top box shows an "a" on the left and a "5" on the right. The bottom box shows a "b" on the left and a "-0.5" on the right.

○ Conceptual drawing:

a	5
b	-1

The image above shows two horizontal boxes. The top box shows an "a" on the left and a "5" on the right. The bottom box shows a "b" on the left and a "-1" on the right.

◉ Conceptual drawing:

a	5
b	-2

The image above shows two horizontal boxes. The top box shows an "a" on the left and a "5" on the right. The bottom box shows a "b" on the left and a "-2" on the right.

○ Conceptual drawing:

a	5
b	-5

The image above shows two horizontal boxes. The top box shows an "a" on the left and a "5" on the right. The bottom box shows a "b" on the left and a "-5" on the right.

✓ **Correct**

Review the reading Expressions with Common Operators.