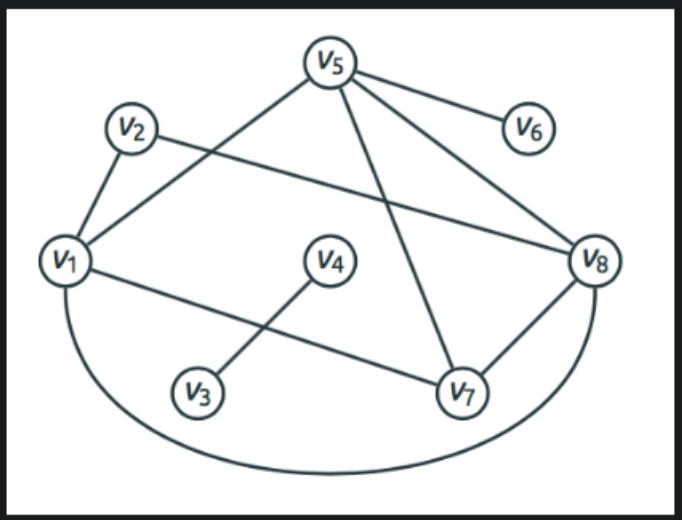
1. 1 / 1 point

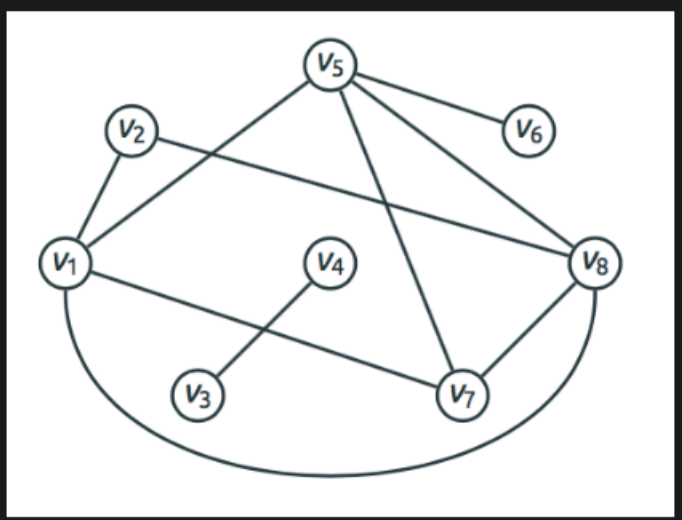


Is this graph connected?

- (●) No
- ( ) Yes

Correct
Correct, this graph is not connected. For example, there is no path between v_1 and v_3.

2. 1 / 1 point

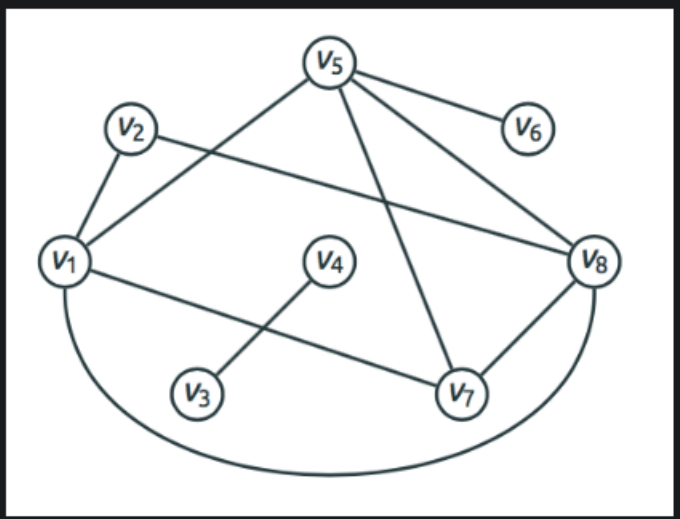


How many connected components does this graph have?

- ( ) 3
- ( ) 8
- ( ) 1
- (●) 2

Correct
Correct, this graph has two connected components: $\{v_1, v_2, v_5, v_6, v_7, v_8\}$ and $\{v_3, v_4\}$.

3. 1 / 1 point

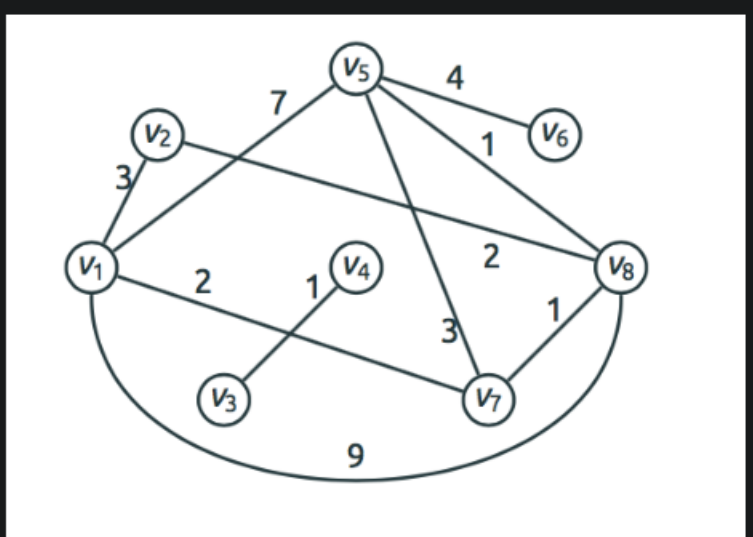


Is there a path from v_1 to v_6?

- (●) Yes
- ( ) No

Correct
Correct, there are several paths from v_1 to v_6. One of them is (v_1, v_5, v_6).

4. 1 / 1 point



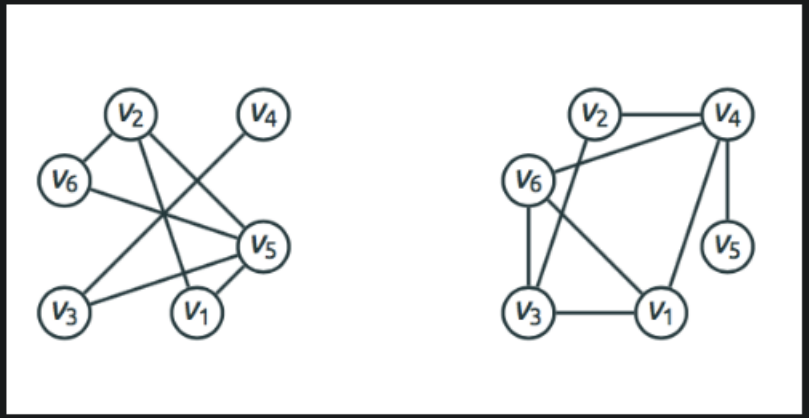
What is the distance (the weight of the shortest path) from v_1 to v_6?

- ( ) 9
- ( ) 11
- ( ) 7
- (●) 8

Correct
Correct, the shortest path is $(v_1, v_7, v_8, v_5, v_6)$.

5.

1 / 1 point



Are these graphs complement?

- (●) Yes
- ( ) No

Correct

Correct, two vertices on the left are connected if and only if they aren't connected on the right.