

# Jerroo Test Review

1. Write a line of code that will instantiate(create) a Jerroo named zeke with the following state:

**Location:** row 5, column 8

**Direction:** WEST

**Number of Flowers:** 25

```
Jerroo zeke = new Jerroo(5, 8, WEST, 25);
```

2. Write a Jerroo method named **plant3** that instructs a Jerroo to plant three flowers in a row directly in front of him.

```
method plant3()
{
    hop();
    plant();
    hop();
    plant();
    hop();
    plant();
}
```

3. The main method below has instantiated a Jerroo named dak. Send dak a message asking him to perform the **plant3** behavior defined in question 2. Assume **plant3** works as specified.

```
method main()
{
    Jerroo dak = new Jerroo();

    dak.plant3();
}
```

4. Assume there is a Jerroo named dak. He is facing a row of 10 nets directly in front of him. Write a while loop that will allow him to remove all of the nets and then stop when all 10 nets have been disabled. dak has 10 flowers in his pouch.

```
while(dak.hasFlower())
{
    dak.toss();
    dak.hop();
}
```

5. Assume there is a Jeroo named zeke. Write an if/else statement that checks to see if there is a flower directly in front of him. If there is a flower in front of him he should hop forward one space and pick up the flower, **otherwise** he should turn to his right and plant 3 flowers in a row. You can use the **plant3** method defined in question 2 in your implementation.

```
if(zeke.isFlower(AHEAD))
{
    zeke.hop();
    zeke.pick();
}
else
{
    zeke.turn(RIGHT);
    zeke.plant();
    zeke.hop();
    zeke.plant();
    zeke.hop();
    zeke.plant();
}
```

6. Assume there is a Jeroo named eve. Write an if statement that determines if eve has a flower in her pouch **and** there is a net to her left. If this condition is true eve needs to turn to her left then toss a flower on to the net to disable it and then hop forward one space to occupy the space left by the net.

```
if(eve.hasFlower() && eve.isNet(LEFT))
{
    eve.turn(LEFT);
    eve.toss();
    eve.hop();
}
```

7. Assume there is a Jeroo named `jesus`. Write an if/else statement that determines if there is a Jeroo **or** a net directly in front of him. If the condition is true `jesus` needs to turn to his right, **otherwise** he needs to turn to his left.

```
if(jesus.isJeroo(AHEAD) || jesus.isNet(AHEAD))
    jesus.turn(RIGHT);
else
    jesus.turn(LEFT);
```

8. Assume there is a Jeroo named `amy`. `Amy` is currently located on the east shore of an island facing west with 50 flowers in her pouch. `Amy` wants to cross the island to the west shore. Unfortunately, a trapper has placed several nets on the island to try and catch her. Write a code segment that will help `amy` cross the island and disable any nets she may encounter on her journey.

```
while(!amy.isWater(AHEAD))
{
    if(amy.isNet(AHEAD))
        amy.toss();
    amy.hop();
}
```