
```
Enter a value for x: 3
Enter a value for y: 5
x^2 + 2xy + y^2 = 64
-- program is finished running --
```

```
Enter a value for x: 7
Enter a value for y: 9
x^2 + 2xy + y^2 = 256
-- program is finished running --
```

```
Enter a value for x: 10
Enter a value for y: 4
x^2 + 2xy + y^2 = 196
-- program is finished running --
```

$$x^2 + 2xy + y^2$$

$$x=3, y=5 \quad (3)^2 + 2(3)(5) + (5)^2$$

$$9 + 30 + 25$$

$$39 + 25$$

$$(64) \quad \checkmark \quad \text{matches code output}$$

$$x=7, y=9 \quad (7)^2 + 2(7)(9) + (9)^2$$

$$49 + 126 + 81$$

$$175 + 81$$

$$(256) \quad \checkmark \quad \text{matches code output}$$

$$x=10, y=4 \quad (10)^2 + 2(10)(4) + (4)^2$$

$$100 + 80 + 16$$

$$(196) \quad \checkmark \quad \text{matches code output}$$