'fighter'

Λ

2 'fly'

```
print \{z\}^2 = \{x\}^2 + \{y\}^2
```

```
print \{z\}^2 = \{x\}^2 + \{y\}^2
                                        **locals()
```

Equivalent to .format(x=3, foo='fighter', y=4, ...)

```
'x' 3
'foo' 'fighter'
         2 'fly'
'learn'
```



Cute Trick: Unpacking Variadic Keyword Arguments

```
local symbol table
x = 3
foo = 'fighter'
                                             'x': 3,
y = 4
                                             'foo': 'fighter',
                                             'y': 4,
learn = 2, 'fly'
                                             'learn': (2, 'fly'),
                                             'z': 5, ...
z = 5
print("\{z\}^2 = \{x\}^2 + \{y\}^2" format(x=x, y=y, z=z))
print("\{z\}^2 = \{x\}^2 + \{y\}^2" format(**locals()))
# Equivalent to .format(x=3, foo='fighter', y=4, ...)
                                      f-strings (f''') do something like this!
```

Putting it All Together