

## Function Composition — Green Star

1) Draw a Circle of Evaluation and write the Code for a **solid, green star, size 50**.

**Circle of Evaluation:**

**Code:** \_\_\_\_\_

Using the star described above as the **original**, draw the Circles of Evaluation and write the Code for each exercise below.

2 A solid, green star, that is triple the size of the original  
(using `scale` )

**Circle of Evaluation:**

**Code:** \_\_\_\_\_

3 A solid, green star, that is half the size of the original  
(using `scale` )

**Circle of Evaluation:**

**Code:** \_\_\_\_\_

4 A solid, green star of size 50 that has been rotated 45  
degrees counter-clockwise

**Circle of Evaluation:**

**Code:** \_\_\_\_\_

5 A solid, green star that is 3 times the size of the original  
**and** has been rotated 45 degrees

**Circle of Evaluation:**

**Code:** \_\_\_\_\_

## Function Composition — Your Name

You'll be investigating these functions with your partner:

```
# text :: String, Number, String -> Image      # frame :: Image -> Image
# flip-horizontal :: Image -> Image            # above :: Image, Image -> Image
# flip-vertical :: Image -> Image              # beside :: Image, Image -> Image
```

1) In the editor, write the code to make an image of your name in big letters in a color of your choosing using `text`. Then draw the Circle of Evaluation and write the Code that will create the image.

Circle of Evaluation:

Code: \_\_\_\_\_

Using the "image of your name" described above as the **original**, draw the Circles of Evaluation and write the Code for each exercise below. Test your ideas in the editor to make sure they work.

2 The framed "image of your name".

Circle of Evaluation:

Code: \_\_\_\_\_

3 The "image of your name" flipped vertically.

Circle of Evaluation:

Code: \_\_\_\_\_

4 The "image of your name" above "the image of your name" flipped vertically.

Circle of Evaluation:

Code: \_\_\_\_\_

5 The "image of your name" flipped horizontally beside "the image of your name".

Circle of Evaluation:


Code: \_\_\_\_\_

## Function Composition — scale-xy

You'll be investigating these two functions with your partner:

```
# scale-xy :: Number, Number, Image -> Image
```

```
# overlay :: Image, Images -> Image
```

The Image:	Circle of Evaluation:	Code:
	<div><div>rhombus</div><div>40 90 "solid" "purple"</div></div>	<pre>rhombus(40, 90, "solid", "purple")</pre>

Starting with the image described above, write the Circles of Evaluation and Code for each exercise below. Be sure to test your code in the editor!

1 A purple rhombus that is stretched 4 times as wide.

Circle of Evaluation:

Code: \_\_\_\_\_

2 A purple rhombus that is stretched 4 times as tall

Circle of Evaluation:

Code: \_\_\_\_\_

3 The tall rhombus overlayed on the wide rhombus.

Circle of Evaluation:

Code: \_\_\_\_\_

★: Overlay a red rhombus onto the last image you made.

Circle of Evaluation:

Code: \_\_\_\_\_