

Contract Practice 2

For each of the sets of examples, write the contract for the function **above** the examples.

1. ; **third-root** : **Number** -> **Number**

```
(EXAMPLE (third-root 16) (expt 16 1/3))  
(EXAMPLE (third-root 125) (expt 125 1/3))
```

2. ; **sentence-length** : **String Number** -> **Number**

```
(EXAMPLE (sentence-length "hello" 5) (+ (string-length "hello") 5))  
(EXAMPLE (sentence-length "please" 2) (+ (string-length "please") 2))  
(EXAMPLE (sentence-length "goodbye" 10)  
          (+ (string-length "goodbye") 10))
```

3. ; **upside-down** : **Image** -> **Number**

```
(EXAMPLE (upside-down (triangle 50 "solid" "yellow"))  
          (rotate 180 (triangle 50 "solid" "yellow")))  
(EXAMPLE (upside-down (star 150 "outline" "blue"))  
          (rotate 180 (star 150 "outline" "blue")))
```

4. ; **product-squared** : **Number Number** -> **Number**

```
(EXAMPLE (product-squared 5 6) (sqr (* 5 6)))  
(EXAMPLE (product-squared 10 17) (sqr (* 10 17)))  
(EXAMPLE (product-squared 2 5) (sqr (* 2 5)))
```

5. ; **half-image** : **Image** -> **Image**

```
(EXAMPLE (half-image "www.images.com/cat_image.jpg")  
          (scale 0.5 (bitmap/url "www.images.com/cat_image.jpg")))  
(EXAMPLE (half-image "www.images.com/dog_image.jpg")  
          (scale 0.5 (bitmap/url "www.images.com/dog_image.jpg")))
```