

Sunlight and Similar Triangles: $\frac{H_{bldg}}{H_{bar}} = \frac{S_{bldg}}{S_{bar}}$

```
(define (similar-triangles s-bar h-bar s-bld h-bld)
  (let ((ratio (make-cell)))
    (c:* s-bar ratio s-bld)
    (c:* h-bar ratio h-bld)))
```

```
(define baro-height (make-cell))
(define baro-shadow (make-cell))
(define bldg-height (make-cell))
(define bldg-shadow (make-cell))
(similar-triangles baro-shadow baro-height
                   bldg-shadow bldg-height)
```

```
(add-content bldg-shadow (make-interval 54.9 55.1))
(add-content baro-height (make-interval 0.3 0.32))
(add-content baro-shadow (make-interval 0.36 0.37))
```

```
(content bldg-height)
=> #(interval 44.514 48.978)
```