

## Translating into Algebra...

| Values: Translate the Racket Code into Algebra   |   |
|--|---|
| Racket Code  | Algebra   |
| <code>(define x 10)</code>   | $x = 10$  |
| <code>(define y (* x 2))</code>  | $y = x*2$   |
| <code>(define z (+ x y))</code>  |   |
| <code>(define age 14)</code>   |   |
| <code>(define months (* age 12))</code>  |   |
| <code>(define days (* months 30))</code>   |   |
| <code>(define hours (* days 24))</code>  |   |
| <code>(define minutes (* hours 60))</code>   |   |
| Functions: Translate the Racket Code into Algebra  |   |
| <code>(define (double x)<br/>  (* x 2))</code>   | $\text{double}(x) = x*2$  |
| <code>(define (area length width)<br/>  (* length width))</code>   | $\text{area}(\text{length}, \text{width}) = \text{length} * \text{width}$ |
| <code>(define (circle-area radius)<br/>  (* pi (sq radius)))</code>  |   |
| <code>(define (distance x1 y1 x2 y2)<br/>  (sqrt (+ (sq (- x1 x2))<br/>           (sq (- y1 y2)))))</code> |   |