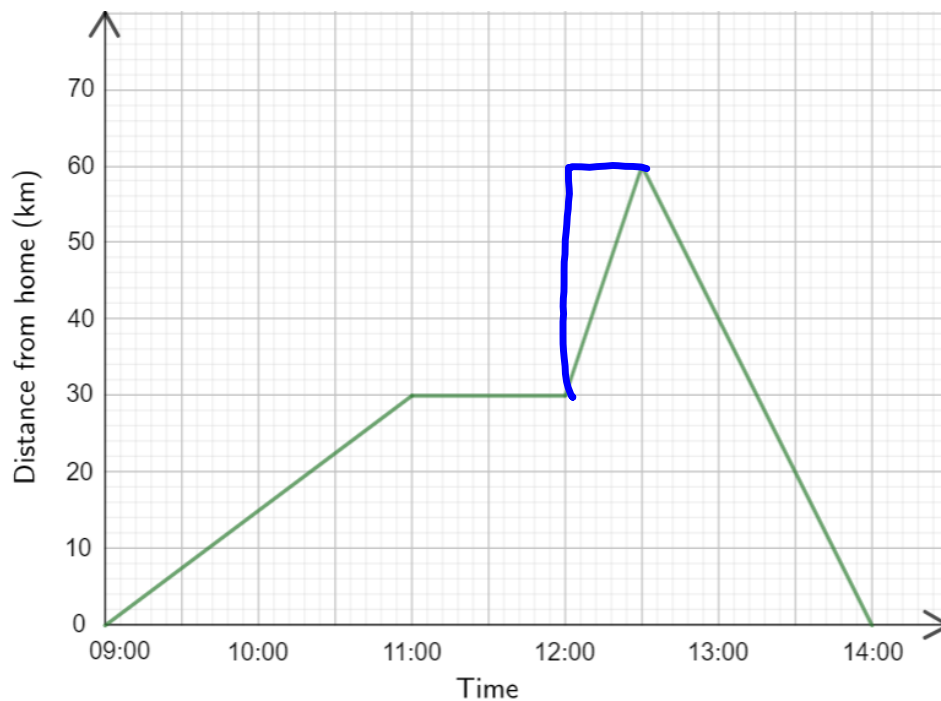
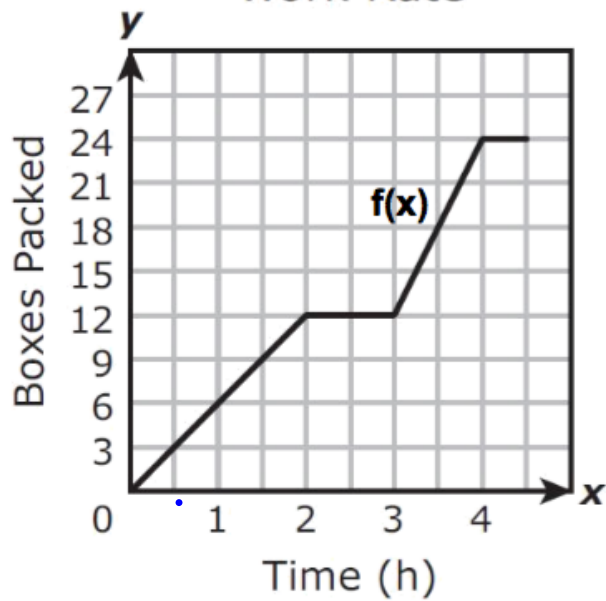


Warm up:

Find the rate of change for each interval on the graph.



Work Rate



Function Notation

Can you figure out what this notation means?

$f(2) = 12$       $(2, 12)$

$f(4) = 24$

$f(0) = 0$

Can you fill in the missing blanks?

$f(1) = \underline{6}$

$f(3.5) = \underline{18}$

$f(\underline{.5}) = 3$

$f(\underline{1.5}) = 9$

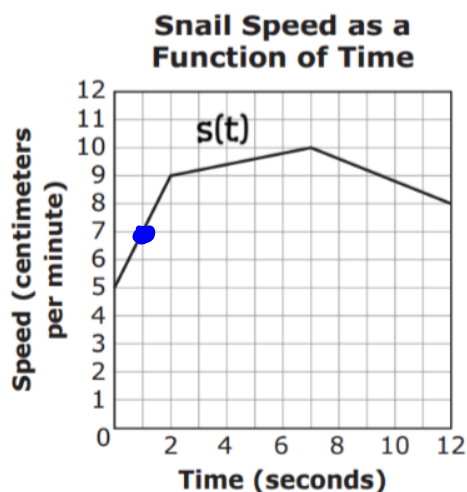
$f(x) = y$

$f(x) = 2x + 3$

$f(3) = 2(3) + 3$

$f(3) = 9$

### Evaluating a Function From a Graph



Evaluate	Meaning
$s(7) = 10$	after 7 seconds, he's going 10 cm/min
$s(6) = 9.8$	
$s(12) = 8$	After 12 seconds, the snail was traveling at a speed of 8 cm/minute.
$s(11) = 8.5$	
$s(1) = 7$	After <u>1</u> second(s), the snail was traveling at a speed of 7 cm/minute.

**Evaluating a Function From a Table**  
**Charge for Delivery**

Miles Traveled $x$	Charge $c(x)$
1	\$14.00
2	\$21.00
3	\$28.00
4	\$35.00
5	\$42.00
6	\$49.00

Evaluate	Meaning
$c(3) = \underline{28}$	
$c(1) = \underline{14}$	
$c(5) = \underline{42}$	The delivery charge for 5 miles is \$42.00.
$c(4) = \underline{35}$	
$c(2) = \underline{21}$	The delivery charge for <u>2</u> miles is \$21.00.

**Evaluating a Function from an Equation**

$$f(x)=x^2+3 \quad g(x)=x+1 \quad h(x)=2$$

$$f(3)=\overset{\downarrow}{(3)}^2+3 \quad f(3)=12$$

$$g(3)=3+1 \quad g(3)=4$$

$$h(3)=2$$

$$f(-2)=(-2)^2+3 \quad f(-2)=7$$

$$g(0)=1$$

$$h(-5)=2$$

### Evaluating a Function from an Equation

$$f(x) = x^2 + 3 \quad g(x) = x + 1 \quad h(x) = 2$$

$$f(2) + g(1) = 7 + 2 = 9$$

$$g(-1) + h(-1) = 0 + 2 = 2$$

$$f(g(2)) = 7$$

$$g(f(0)) = 4$$

$$f(g(h(1))) = 7 \quad \underline{f(g(2))}$$

$$h(1) = 2 \quad g(2) = 3 \quad f(3) = 12$$

$$g(2) = 3 \quad f(3) = 12$$

$$f(0) = 3 \quad g(3) = 4$$

## Evaluating a Function from an Equation

$$f(x)=x^2+3 \quad g(x)=x+1 \quad h(x)=2$$

$$f(y)=$$

$$g(w)=$$

$$h(z)=$$

$$g(t+2)=$$

