

Good Morning Happy Thursday!

Agenda:

- Warm UP

- Return Tests

- Answer questions from Practice/Delta math

- Continue Inverses.

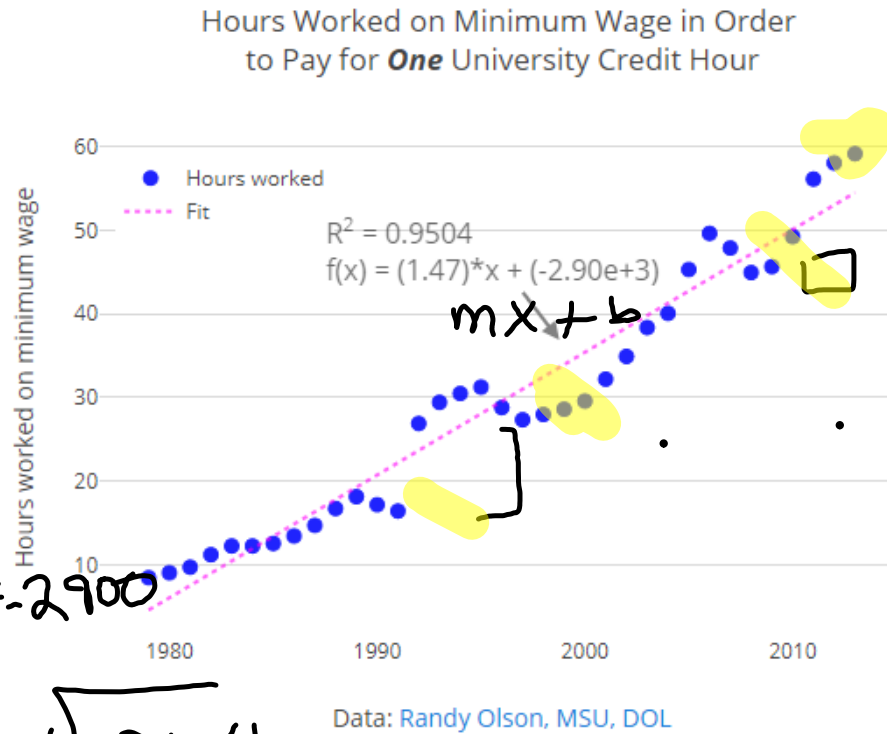
Warm UP:
Interpret

a) the slope
1.47

b) y-intercept
 -2.90×10^3
 $-2.90 \times 10^3 = -2900$

c) r-value
 $0.9749 = \sqrt{0.9504}$

Strong positive correlation
b/w year and hours worked
@ min wage for one credit.



⑥ $f(x) = \frac{x-1}{x+5} \rightarrow 0 \quad X \neq -5$

$y = \frac{x-1}{x+5} \quad (1)$

$X = \frac{y}{7}$

~~$x+5 = \frac{y-1}{y+5} \quad (2)$~~

$y+5(x) = y-1 \quad (3)$

~~$yx + 5x = y - 1$~~
 ~~$-y \quad -5x \quad -1$~~

$yx - y = -1 - 5x \quad (4)$

$y(x-1) = \frac{-1-5x}{x-1} \quad (5)$

$y = f^{-1}(x) = \frac{-5x-1}{x-1} \quad (6)$

Verify
two functions are inverses
by compositions

function inside a function

$$f(g(x)) \quad f(f^{-1}(x))$$

$f \circ g, g \circ f, x.$

$$f(x) = 4x \quad y = 4x \quad y = \frac{x}{4}$$
$$\frac{x}{4} = \frac{4y}{4} \quad f^{-1}(x) = \frac{x}{4}$$

$$f(f^{-1}(x)) = 4\left(\frac{x}{4}\right) = x$$

