Please complete the "check your understanding" at the bottom of page 171. Do this even if you have already done it. You need to get the data into your calculator.

$\hat{y} = 16.3 + 0.0907x$

$\hat{y} = a + bx$

$x: \bar{x}, s_x \qquad y: \bar{y}, s_y$

$\hat{y} = a + bx: \quad b = r \cdot \frac{s_y}{s_x}$

$a = \bar{y} - b\bar{x}$

$\hat{y} = a + bx$ LSRL passes through $(\bar{x}, \bar{y})$

$\bar{y} = a + b\bar{x}$

Solve for a:

$a = \bar{y} - b\bar{x}$

slope: $b = r \cdot \frac{s_y}{s_x}$

Hiker data:

$r = 0.7946$ } from calculator

$a = 16.26$

$b = 0.0907$ }

Check that we get same values when we use formulas.

$b = r \cdot \frac{s_y}{s_x}$

$b = 0.7946 \cdot \frac{3.4615}{30.296}$

Check $a = \bar{y} - b\bar{x}$

Blank paper

p. 192 #48

HW - Figure out how to use your calculator to perform regression.

AND 43, 45, 47, 53

Reading Guide