#/625 \to \text{ after 200 pt find } 825

825 pts \quad \text{A} \to 739 \quad 825(0.895)

\quad \text{B} \to 656 \quad 825(0.795)

\underline{\text{student A}} \quad \text{C} \to 574 \quad 825(0.695)

520 pts \quad 573

\[
8^2 + 6^2 = c^2 \\
64 + 36 = c^2 \\
100 = c^2 \\
10 = c
\]

\[
5^2 + 12^2 = c^2 \\
25 + 144 = c^2 \\
13 = c
\]
A board is 4” wide and the room is 228” wide. How many boards are needed?

\[
\frac{228}{4} = 57
\]
Proportions

Indirect

One up one down
- a little harder

Ex: driving speed to time in car
- a job to people + time

direct

- both up or down
- easier

Ex: good grades to overall grade
- work time to $$

10 rolls of paper to cover 220 ft^2
How many to cover 3500 ft^2

\[
\frac{10}{x} = \frac{220}{3500}
\]

\[
10(3500) = 220x
\]

\[
\frac{10(3500)}{220} = x
\]

160 rolls = x
Pulley has a diameter of 10” and an rpm of 350. How big of a pulley for 750 rpm?

Indirect

\[
\frac{10}{x} = \frac{350}{750}
\]

\[
\frac{10}{x} = \frac{750}{350}
\]

\[
10 \times \frac{750}{350} = x
\]

\[
10(350) = x
\]

\[
4.7” = x
\]

**Part Rate Base**

\[
\frac{\text{Part}}{\text{Rate}} + \text{Base}
\]

- piece of base (could be bigger)
- percent: 30%, rare 5 5/8%, car loans
- original starting
We make $13.25/hr and get a 7% raise. What is my new hourly salary? 107% or 1.07

\[ P = RB \]

\[ P = 1.07 \times 13.25 \]

\[ P = 14.18 \]

We have a home worth $225,000 but it lost 13% value. What is it worth today? 87%.

\[ 225000 \times 0.87 \]

\[ = 195750 \]
Salary is $35,000 after a 4% raise. What was my salary last year?

\[ P = \frac{35000}{1.04} = 33653.85 \]

\[ B = \frac{35000}{0.96} = 36458 \]

\[ R = \frac{P}{B} \]

Final 8am
Tuesday Dec 15
Notes on the back of conversion sheet.