

Lesson 3-4 → Comparing Linear Relationships

As we have seen, proportional relationships are just linear relationships that start at the origin $(0,0)$.

Let's compare some proportional relationships using linear relationship terms.

Which company has the best price for bananas?

Red Co.

Dollars (Y) Pounds (X)

0 0

20 40

50 100

Change
in y

20

$$\frac{20}{40} = 0.5$$

30

$$\frac{30}{60} = 0.5$$

Change
in x

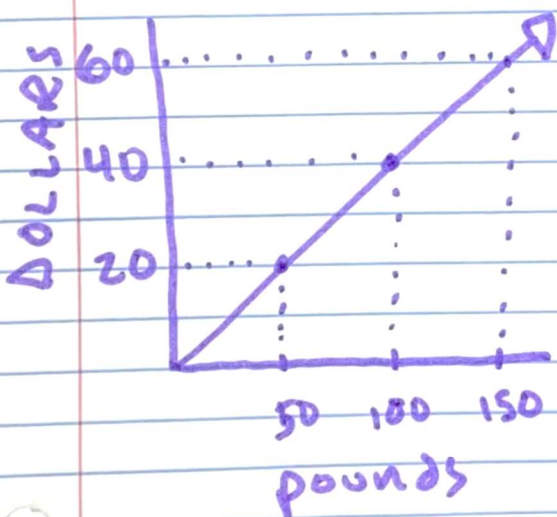
40

60

bananas cost \$0.50/pound

$$y = 0.5x$$

Purple Co.



$$\frac{\text{Rise}}{\text{Run}} = \frac{20}{50} = 0.4$$

bananas cost \$0.40/pound

$$y = 0.4x$$

Purple Co. has the better price!