Solving Inequalities in Business
Profit

- **Cost** - How much you spend.
- **Revenue** - How much money you take in.

To make a profit,

\[
\text{Revenue} > \text{Cost}
\]
Example: Bake-Sale

- You buy a pack of 12 cupcakes from the store for $4. You sell all 12 of them at a bake sale for $p each.
- Your **cost** is $4.
- Your **revenue** is 12p (unless you can’t sell all of them).
- You make a profit if
  \[ 12p > \$4 \]
Example: Selling fries

- Fries are a popular street food in Namibia. In Namibia, you could buy a 5kg bag of potatoes for N$50 (about $7), and 1L of oil for N$20 (about $3). This would be enough to sell about 30 bags of fries.

- What is your **cost**?
  - What if you only use half of the oil?

- What is your **revenue**?

- How much should \( p \) be to make a **profit**?

- If they sell fries for N$2 per bag, will they make a profit?
Selling ice cream floats

- Assignment: You want to try to sell root-beer floats to raise money.
- Figure your costs, estimate how many you can sell, and calculate the price in order to make a profit.

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