1. Calculate the gross profit on our snowboard

Formula: Price minus cost

In [3]:
```
snowboard_price = 499.99
snowboard_cost = 199.99
gross_profit = snowboard_price - snowboard_cost
print(gross_profit)
```

```
300.0
```

2. Calculate the gross margin on our snowboard

Formula: Gross profit divided by price

In [5]:
```
gross_margin = gross_profit / snowboard_price
print(gross_margin)
```

```
0.6000120002400048
```

3. Calculate the price needed to obtain a gross margin of 70%

Formula: cost divided by (1 minus the desired margin).

In [6]:
```
snowboard_cost / (1-0.7)
```

Out[6]:
```
666.6333333333332
```

4. Calculate the sales tax on a sale of our snowboard

Tax rate: 8%

Formula: Price times tax rate

In [9]:
```
tax_rate = .08
sales_tax = snowboard_price * tax_rate
print(int(sales_tax))
```

```
39
```

5. Return on Profits

Calculate the amount of money we'd have if we invested the profit from selling 5 snowboards for one year.

Assume an interest rate of 5%.

The formula is the amount_invested plus (amount_invested times interest_rate)

In [14]:
```
amount_invested = gross_profit * 5
interest_rate = 0.05

amount_after_1yr = amount_invested + (amount_invested * interest_rate)

print(amount_after_1yr)
```

```
1575.0
```

In [*]:

In [*]:

In [ ]: