Forecasting for Success in Entrepreneurship:
Break-Even Analysis

Definition of Variables and Formulas:
Fixed expense: the costs of running your business that do not change with sales volume.
Variable expense: additional cost per piece produced, person served or item sold.
Price: The amount the customer pays per item or service.
Units: The number of items or services sold during the given time period.

Unit Contribution Margin = Price – Variable Expense

$$\textbf{Break Even Units} = \frac{\textbf{Fixed Expense}}{\textbf{Unit Contribution Margin}}$$

Triton Pizza Shack Scenario:
Triton Pizza Shack wants to know how many pizzas it needs to sell, at what price, and what variable cost, to break even.

Fixed expenses for month: $10,000
Includes building rental, salaries, insurance, utilities, advertising, administration.

Variable expenses per pizza: $?
Includes ingredients, box, napkins, and additional utilities.

Average sale price per pizza: $?

Units sold per month: ?

Pizza Price	**Variable Expenses**	***UMC*= *P-V***	**Units Sold**	**Fixed Costs**
$7	$5		?	$10,000
$7	$4		?	$10,000
$7	$3.50		?	$10,000
$7	?		3,000	$10,000
$7	?		4,000	$10,000
$7	?		2,000	$10,000
?	$4		6,000	$10,000
?	$4		10,000	$10,000
?	$4		1,000	$10,000