



BREAKING DOWN THE NUMBERS

6 Calculations to Know
When Financing Equipment

An Introduction to Breaking Down the Numbers

Whether you've financed equipment before or you're just starting to look into it, you probably noticed some crazy calculations and terms being thrown around during the process. If the idea of calculating lease rates and depreciation makes your head spin and sends you into a cold sweat, keep reading!

After breaking down what goes into each calculation and why each little detail matters, you'll feel more confident in both your business' financial health and your equipment leasing/financing agreement!



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Breakeven

Breakeven is one of the more useful and informative calculations to know about when it comes to financing and budgeting. Put simply, breakeven is the amount of income you'll need to earn from the financed equipment to match the amount spent on the payment each month. This is incredibly useful when trying to determine your return on investment (ROI), since it tells you how much profit you'll eventually need the equipment to bring in.

Now that you know what breakeven is and why it's important, you can learn to calculate it.

Terms To Know

Fixed Cost: the cost of the monthly payment

Variable Costs: any cost that depends on the sales volume (fabric, gas, ink, etc.)

Selling Price: your sales price for the service or product



EXAMPLE

Fixed Cost: \$580

Variable Cost: \$10

Selling Price: \$80

fixed costs / (price - variable costs) = breakeven

\$580 / (\$80 - \$10) = 8.3 units

To breakeven each month with a payment of \$580 and a selling price of \$80, you would need to sell about 8.3 units.



Formula:

$$\frac{\text{fixed costs}}{(\text{price} - \text{variable costs})} = \text{breakeven}$$



Depreciation

A key part of determining if the equipment you're considering is worth the cost is calculating depreciation. Depreciation is a preferred method for finding the useful life of a piece of equipment and evaluating the cost of it over the active years of use. By determining depreciation, you'll be a better able to understand the value of the equipment and the potential tax deductions it provides.

To calculate depreciation, you'll need to take the initial cost of the equipment and subtract the estimated residual value. That number is then divided by the number of years the equipment will be put to use.



EXAMPLE

You purchased a tow truck for \$65,000 in 2015. You estimate that you'll receive 10 years of use out of the truck. After ten years, the truck is estimated to be worth \$25,000.

(initial cost - residual cost) / years of usefulness = depreciation

$$(\$65,000 - \$25,000) / 10 = \$4,000$$

The truck will depreciate \$4,000 dollars each year it is in use for 10 years. That \$4,000 is tax deductible each year.



Formula:

$$\frac{(\text{initial cost} - \text{residual cost})}{\text{years of usefulness}} = \text{depreciation}$$



Gross Profit

The gross profit of your business is a clear indicator of how things are going financially, and it's often used by financing companies to get a quick overview of your ability to afford new equipment. Luckily, once you have a grasp of your expenses and sales, calculating gross profit is fairly easy. You'll need to take your pre-tax net sales and subtract the cost of goods/services sold.



EXAMPLE

Your total sales during the first quarter were \$25,000. Your cost of goods sold totaled to \$14,759 for the same period.

What is your gross profit?

To determine your gross profit for the quarter:

gross sales - cost of goods sold = gross profit

\$25,000 - \$14,759 = \$10,241 Total Gross Profit



Lease Payments

Here's the long-awaited leasing rates calculation. You've probably found yourself wondering how your lender comes up with rates seemingly out of thin air. The secret is about to be revealed. Leasing and financing rates are calculated by considering the equipment cost, the time of the lease, and the amount charged per thousand dollars of equipment leased.



EXAMPLE

In a five year (60 month) lease with a leasing charge of \$24.00 per \$1,000 per month, the rate factor equates to .024.

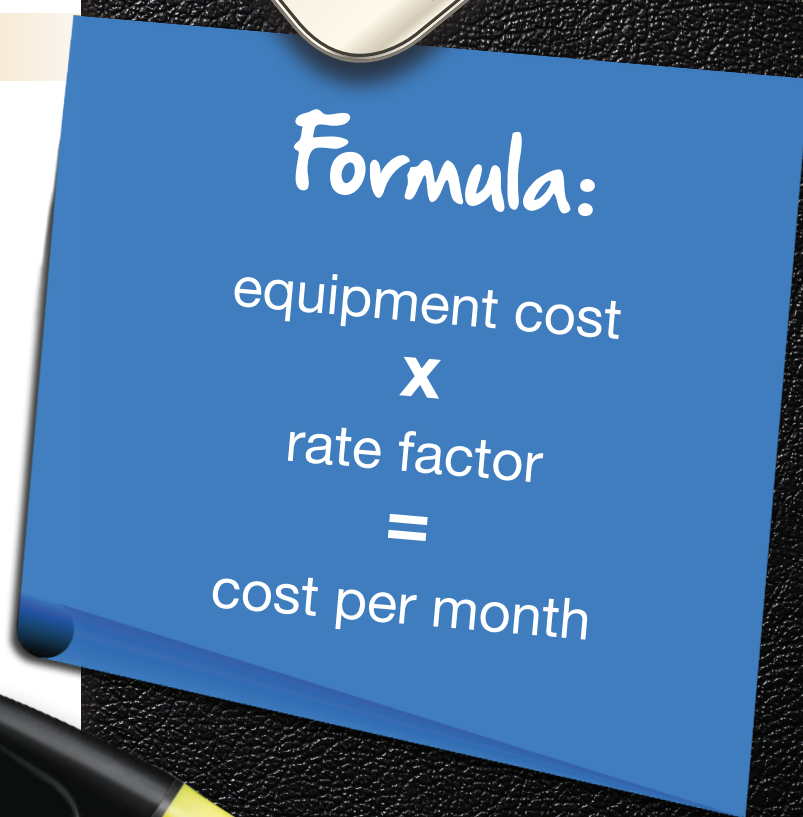
How to solve for the rate factor: $\$24.00 / \$1,000 = .024$ rate factor

To determine the payment for equipment costing \$25,000:

equipment cost X rate factor = cost per month

\$25,000 X .024 = \$600 per month

The leasing charge itself is determined by the lender using a few factors, like current money market costs, lease term, equipment cost, purchase option alternatives, lease type and structure, and any other variables.



Liquidity

Liquidity is often a huge factor in determining a business' financial situation. It's actually so important that lack of liquidity typically plays a huge part in a business' financial issues and even its failure. Liquidity simply refers to a business' ability to use liquid assets, be they cash or readily accessible, to pay for their business' expenses and needs.



EXAMPLE

Current Assets: \$1,500,000

Current Liabilities: \$1,000,000

To determine your liquidity ratio the simplest way is to divide your current assets by your current liabilities.

current assets / current liabilities = liquidity ratio

$$\mathbf{\$1,500,000 / \$1,000,000 = 1.5}$$

A close-up of a smartphone screen displaying a calculator app. The screen shows the time 12:34, a battery level of 100%, and various calculator functions like MC, MR, %, and a numeric keypad.

Formula:

$$\begin{aligned} &\text{current assets} \\ &\div \\ &\text{current liabilities} \\ &= \\ &\text{liquidity ratio} \end{aligned}$$

Net Income

Similar to gross profit, net income offers a good look into the financial stability of your company. To be able to accurately calculate it, you'll need to have a solid grasp on your total expenses including cost of production, SG&A (selling, general, and administrative expenses), taxes, etc. Once you understand all of the expenses related to your business, you can determine net income by subtracting them from your total revenues.



EXAMPLE

After adding in any costs of production to your expenses, your total expenses equal \$75,000. To determine net income, you'll need to subtract that number from your total revenue.

total revenues - total expenses = net income

$$\mathbf{\$250,000 - \$75,000 = \$175,000}$$



Formula:

$$\begin{aligned} &\text{total revenues} \\ &\quad - \\ &\text{total expenses} \\ &\quad = \\ &\text{net income} \end{aligned}$$



Cash Flow

Cash flow is another powerful measure of a company's financial health. It also comes in handy when trying to calculate a budget for procuring more equipment. To elaborate, cash flow is a critical measure of your business' ability to meet lease or financing obligations. When calculating your business' cash flow, you're evaluating your business' available cash at the beginning of a time period and the amount available at the end. By calculating this, you'll determine how much cash you have in the budget for a new equipment lease.

Cash flow is calculated by adding your net business income to its depreciation expense for a particular period (i.e. month, quarter, year), and subtracting the current portion of long-term debt. The remainder of this formula is the available cash you have to start a new lease.

Since cash flow can be a trickier concept to understand and calculate, it's always a good idea to check with your accountant to get a firm answer.

Formula:

$$\begin{array}{r} \text{Step 1: net income} \\ + \\ \text{depreciation expense} \\ = \\ \text{x value} \end{array}$$

$$\begin{array}{r} \text{Step 2: x value} \\ - \\ \text{long term debt} \\ = \\ \text{cash for new lease} \end{array}$$

Now You Know

Although there are a few more things that come into play when determining your business' financial wellbeing and your ability to finance equipment, these six calculations cover a lot of ground. After determining these financial aspects of your business and your potential financed equipment, you'll get a great picture of your business and be better off understanding any financing terms and numbers thrown at you while running and growing your business.

You Aren't on Your Own

Still feeling a little overwhelmed with the formulas and numbers? You certainly aren't alone. Rather than calculating all these numbers on your own, you can use the Finance Calculator to determine lease payments, tax savings, and even your breakeven!

beaconfunding.com/calculator

**To the best of Beacon Funding's knowledge, these formulas and calculations are correct. The numbers used in all formulas are not representational of any business and should not be used to gauge your business' financial health. All information is intended for educational purposes only and is not to be taken as financial advice. For detailed look at your business financials, speak with your accountant. Use this information at your own discretion.*

