SageQuest

4 Steps to Understanding ROI for GPS Vehicle Tracking

A guide to quickly decreasing costs and improving efficiency.

TABLE OF CONTENTS

Introduction

For more than a decade, a growing number of companies with mobile workforces have generated substantial savings and efficiency improvements through the use of GPS vehicle tracking solutions. During that time the potential for companies to drive such dramatic results in such short time frames has fueled continued growth within the vehicle tracking industry. Each year, more and more companies evaluate the potential for a solution within their business.

But as with any new technology, it is still necessary for companies to justify the expense before making the investment. This guide makes it easy to take a closer look at the costs, benefits, and the proven return on investment (ROI) you can expect when a solution is in place.

What is ROI?

Return on investment (ROI) is a simple calculation that shows a buyer the monetary value they are receiving from a purchase. Ideally in any major investment for your business, you can prove that the money you invest will return to you quickly and, in some cases, many times over in savings or new profits.

$$\text{ROI} = \frac{\text{Benefit Realized} - \text{Investment Cost}}{\text{Investment Cost}}$$

This formula will give you a percentage that shows how much your benefit outweighs your investment.

You Can't Manage What You Can't Measure

An investment in GPS tracking yields immediate results. Gaining visibility into actual fleet activity reveals opportunities to improve performance across a variety of different metrics. But the real leverage comes from the sheer size of the expenses involved in managing a mobile workforce—fuel, payroll, and vehicle management. **In a recent survey of buyers of real-time GPS tracking systems, 75% said they saw ROI within the first year.**

Beyond the quantifiable savings, GPS tracking can also increase customer satisfaction. According to Scott Steckel, Owner, Varment Guard, Columbus, OH:

"Pest control businesses like ours provide health, safety, and security to our customers—and with GPS tracking, not only do we save 18% on fuel, but we have added credibility because our customers know that our invoices are correct."

What kind of return should you expect by installing GPS tracking in your fleet?

Our 4 easy steps will help you calculate ROI and consider all the ways you can achieve a great return:

- Step 1 will identify which expenses to include in your ROI calculation.
- Step 2 will determine the costs of a vehicle tracking solution.
- Step 3 will quickly and easily build your ROI calculation.
- Step 4 will consider the relevance of other benefits to your business.

For your convenience we've also included a worksheet at the end of this guide that you can print and use to complete your own company's expected ROI.

Your Potential Return Depends on Your Business and Situation

There are no standard rules for how much fuel you will save and no universal assumptions for the number of hours you'll save in a week. The bottom line is that your potential return depends on your business and your current situation. Looking at examples from your industry will absolutely help and should give you a greater degree of confidence in your calculation. But the only real way to understand and ultimately maximize your potential return requires a thoughtful look into your own business.

Rise to the Challenge of Tough Times

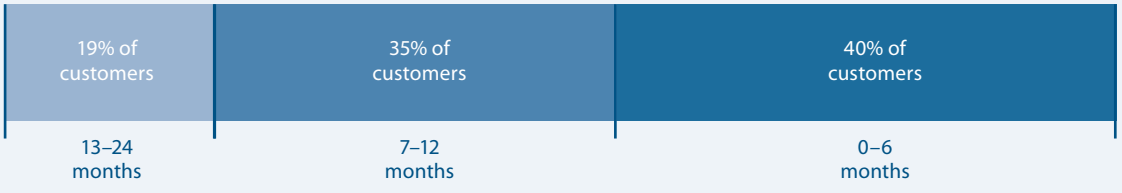
Despite evidence of a quick ROI from GPS solutions, you still might be leery of making capital investments in the current economy. This is understandable. However, the most competitive companies know that they need to continue to invest in their businesses even in down times and that doing so will make them even more competitive when conditions improve. Now is a good time to invest in a GPS solution in order to maximize profits when your revenues begin to rise.

WHEN SHOULD YOU EXPECT RETURN ON YOUR INVESTMENT?

A key selling point for any vehicle tracking system is that it pays for itself quickly.

But how quickly is quickly, really?

In a recent survey of real-time vehicle tracking customers, just over 40% of respondents found they were getting return within six months of purchase. Another 35% of respondents saw return from the investment within seven to twelve months of purchase.



* *Based on December 2008 survey of SageQuest customers*

Step 1: Determine Current Costs and Potential Savings

When it comes to calculating potential savings, you need to start with your current expenses. Typically, companies can establish a return based on just two primary expenses:

- Fuel costs
- Payroll costs

These are critical expense numbers, and are also places where vehicle tracking systems have shown a proven impact. Focusing in on just these two expenses helps in a variety of ways:

- Companies can usually quantify these expenses easily.
- These two expenses are usually pretty substantial, creating good leverage for the calculation.
- By eliminating the noise of "soft benefits" that are more speculative or preventative in nature, the calculated return should be conservative.

If you can't achieve a positive ROI using just these two factors, you will probably not be able to justify the investment in vehicle tracking.

Fuel Costs and Savings

Using a GPS vehicle tracking system is a proven way to decrease overall mileage by eliminating unauthorized travel and improving daily routing. Features like speeding reports and alerts, along with idling alerts also help reduce these fuel-wasting behaviors that can add up quickly for any fleet.

Understand your current costs:

To determine how much your company could save, first start with your current fuel costs. You may use a fuel card system report or tally gas receipts to understand what your monthly gas costs are for your fleet. If you have those numbers available, they will save you time and ensure accuracy.

ROI CASE STUDY

Triple A Fire Protection Reduces Fuel Costs and Payroll Costs

Triple A Fire Protection, located in Semmes, Alabama, invested in SageQuest's Mobile Control GPS solution. Within the first 4 months, Triple A Fire Protection received a return on their investment by decreasing fuel costs and overtime expenses.

Triple A Fire Protection experienced a $6,000 decrease (24%) in fuel costs after one month. The company attributed more efficient routing and decreased downtime—two of Mobile Control's benefits—with slaching monthly fuel costs from $25,000 to $19,000. Triple A Fire Protection has been able to maintain the savings, which will total more than $70,000 over 12 months.

In addition, Triple A Fire Protection put an end to unearned overtime:

" We compared each foreman's timecard to Mobile Control and determined there were employees working 32 to 40 hours and billing Triple A Fire Protection for 48 hours. This saved us $1,200 in the first month, and since then there has been no argument or discrepancies in payroll."

Russell Turner, IT Director, Triple A Fire Protection
Semmes, AL

If you don't have those handy, you can do a simple calculation. You need to know:

a. Approximately how many miles your typical vehicle drives per month

b. The approximate miles per gallon (m.p.g.) of your vehicles which you can easily find online, through the vehicle manufacturer or driver's manual

c. Current price per gallon of fuel

d. Number of vehicles in your fleet

Example: A 20 vehicle fleet where each vehicle travels 1000 miles per month

- The vehicles are Chevy Express vans, which average about 13 m.p.g. in the city
- The current price of fuel is $2.00 per gallon
- Monthly fuel cost per vehicle= (1000 miles/13 miles per gallon) X $2.00 X 20 vehicles
- So the monthly fuel cost would be: $3,077

Find your savings:

In the case study from Triple A Fire Protection, the company reduced their fuel costs by just over 20% per month. That number is similar to what many customers experience from a vehicle tracking system, so we will use it for our example fleet of 20 vehicles.

The fuel savings primarily take shape in a reduction in miles traveled: a 20% reduction in miles traveled would mean each vehicle drives 800 miles per month, or 200 miles less than the current benchmark. Using the math above, the costs at 800 miles per vehicle per month would be $2461 dollars, a savings of $616 per month.

Payroll Costs and Savings

GPS vehicle tracking systems also pay for themselves in helping you understand and control your payroll hours. You will quickly find where time is being wasted, either through unauthorized stops, late starts or extended breaks that aren't being reflected currently in the timecard system.

Understand your current cost:

A simple payroll calculation just requires an understanding of the number of drivers and their hourly wage, which of course may increase for overtime hours.

Example:

- Our 20 vehicle fleet has 1 driver per vehicle, so 20 drivers on a normal 160 hour work month
- At $22/hour, our normal monthly payroll= 20 drivers X 160 hours X $22/hr.
- This creates a monthly cost of $70,400

Find your savings:

In Triple A Fire Protection's real example, they reduced payroll hours from 48 per week to 40 hours per week, or by just over 15%. They achieved this by using a Travel & Stops Report, which they use to verify their timecard system, which relies on the drivers accounting for their own hours. Once the discrepancies became clear, they resolved the issues and began saving.

Triple A Fire Protection's savings are an aggressive benchmark, so if we apply a more conservative 5% reduction to our current 160 hours per driver, per month, the number moves to 152 hours. If we replace 160 hours with 152 in our simple cost equation, we find our new cost would be $66,880—a $3,520 savings per month.

Reducing your current payroll expenses is only one way to leverage the newly created capacity of working hours that come from having a vehicle tracking system in place. See page 8 for more ways to plan for using this new available productivity.

Step 2: Determine the Cost of a GPS Tracking Solution

It is crucial to look at total cost of investment when you consider purchasing a GPS tracking system. However, the information GPS solution providers offer can be confusing and misleading, depending on the companies you are evaluating. In this competitive industry, price models vary greatly. To ensure you are receiving the best value, evaluate the investment over a three-year period, which will give you a better apples-to-apples comparison.

Initial Cost

- Standard pricing includes up-front hardware costs from $400 to $600 per unit depending on the capabilities included.
- Installation costs may be included in the initial costs or billed separately. Generally, installation costs range from $75 to $150 per unit.

Monthly Cost

- All GPS vehicle tracking devices typically have a monthly service charge, which ranges from $30 to $50 per unit, per month depending on the services provided.

Here is a formula to calculate total cost:

$$\text{Total cost} = (\text{hardware cost} + (\text{service charge} \times \#\ \text{of months in contract})) \times \#\ \text{of vehicles}$$

Example:

Our 20 vehicle fleet purchases a system that costs $450 per vehicle for the hardware and $35 per vehicle for the monthly service on a 36 month contract. The total 3 year investment would be:

($450 + ($35 X 36 months)) X 20 vehicles = $34,200

This total investment will be the benchmark to measure against when calculating your return on investment. Your savings benefit over the contract term should easily exceed this number for a vehicle tracking system to make sense for your business.

Step 3: How to Calculate ROI

In order to calculate a return on investment it is necessary to estimate savings in both fuel and payroll. For the example below we have used assumptions based on the real customer example from Step 1 of this guide. Based on our experience these returns are very achievable and should serve as a good starting point for your own calculations. Adjust up or down based on your specific situation and what you believe is realistic.

- Estimated Mileage Savings: 20%
- Estimated Payroll Savings: 5%

Fuel Savings Factors

Number of vehicles	20
Average m.p.g.	13
Mileage per month per vehicle	1000
Current fuel price per gallon	$2

Payroll Savings Factors

Number of drivers	20
Monthly hours per driver	160
Average hourly wage	$22

System Costs (industry average)

Initial hardware cost per vehicle	$450
Monthly service cost per vehicle	$35

Sample fleet information

Monthly Fuel Savings

Start with your current miles per month per vehicle	1000 miles
Apply your estimated mileage savings (e.g. 20%)	200 miles
Divide that number by your current fuel efficiency (e.g. 13 m.p.g.) to get gallons saved per vehicle	15.4 gallons
Multiply the number of gallons saved per vehicle by current fuel price (e.g. $2.00/gal) to get savings per month	$ 30.80
Calculate your total fuel savings—multiply savings per month by your number of vehicles	**$ 616**

Monthly Payroll Savings

Start with your current monthly hours per driver	160 hours
Multiply those hours by your estimated time savings (e.g. 5%) to get hours saved per driver	8 hours
Multiply the hours saved per driver by your average hourly rate to get monthly savings per driver	$ 176
Calculate total payroll savings—multiply the monthly savings per driver by number of drivers	**$ 3,520**

Total Savings Over 3 years

Total your monthly fuel and payroll savings	**$ 4,136**
Multiply by the length of your contract (typically 36 months)	**$ 148,896**

System Cost

Calculate your initial hardware costs ($450 X number of vehicles)	$ 9,000
Calculate total service cost for the length of your contract ($35 x 36 months x number of vehicles)	$ 25,200
Calculate total system cost—initial hardware costs + total service cost for all vehicles	**$ 34,200**

ROI

Subtract your total cost from your total savings and divide again by total cost	**335.37 %**
Calculate time line for break even by dividing total system cost by monthly savings	**8.3 months**

ROI calculation

Step 4: Plan for Productivity and Other Benefits

In addition to fuel and payroll savings, GPS fleet tracking and management solutions provide other benefits that are not as easy to quantify, but can be significant. Because these other benefits don't always apply to a company's business model or specific situation, it's important to treat them separately from fuel and payroll to keep your ROI conservative.

Maximize Resources Through Improved Productivity

Virtually every GPS vehicle tracking provider has an online calculator where prospective customers can type in a number of vehicles along with a couple of other variables and see a calculated return on investment. In addition to fuel and payroll, these calculators always include another broad benefit of 'improved productivity' where they invariably assume that an ability to be more efficient will translate into more revenue.

For a few companies, this assumption works—there may in fact be more customers and more work just waiting in the wings. But for most companies, that is unfortunately not the case. Most businesses are already staffed to service the demands of their customers. So when the benefits of GPS vehicle tracking take shape within their fleet, many businesses are faced with an important question: if we can do more with the resources we already have, what do I do with excess capacity? Here are a few options to consider:

Expand Services: If you don't have additional customers and work waiting for service, you can always try finding more by expanding. Have you ever considered having a larger regional presence, but haven't had the time or resources to see if it would work? Your new open payroll hours could give you the chance to experiment with a wider geographic service, or introduce a new service in your existing market that you don't already offer. Both approaches could create additional revenue, and since the resources are already available, your start up costs will be at a discount.

> **"With Mobile Control, we now save $24,000 a month in operating expenses. We can pass the product's benefits to customers with quick dispatching, better routing and communication with our customers."**
>
> Ken Kump, Service Manager
> United Mechanical Inc., Fort Meyers, FL

Many companies use the additional hours to improve their service by simply doing more for their existing customers. It's always easier and less expensive to keep a customer than to find a new one, so investing the hours to improve service and retention is never a bad idea.

Reduce Expenses Further and Invest Back in the Business: Along the same lines as expanding, is it possible for your company to meet the demand of your market with lower overall hours of service? If so, simply reducing payroll, fuel and all of the vehicle related expenses to line up to the available work is definitely worth considering. Depending on your company goals and strategy, there could be a variety of ways to make use of that savings.

Preserve the Option: If expanding or reducing services doesn't make sense right now, there's always value in preserving the option to go either way at a later date—particularly in our uncertain economic times. You may be concerned about the impact of eliminating quality team members or the risk of expanding in a down market. Either way, a wait and see approach does provide flexibility.

Decreased Maintenance Costs

Some GPS vehicle management solutions offer easy-to-use preventative maintenance tools that track past maintenance and send alerts for upcoming maintenance needs. Reducing unnecessary wear and tear can extend the life of your vehicles, eliminate surprise maintenance expenses and vehicle downtime and even save on fuel costs. When considering this benefit for your business, make sure you understand how vehicle maintenance programs are handled today and the potential efficiency improvements within your office. It may not seem like a big savings, but you would be surprised at how many companies have a time consuming manual process for these activities today.

Improved Safety, Security

With real-time speeding alerts and notifications of other poor driving incidents, you can decrease the likelihood of accidents which will in turn reduce risk and liability for your business. Also, the amount of unauthorized vehicle use after-hours decreases due to the company's ability to locate the vehicles at all times.

GPS solutions give you the piece of mind to know the location of your vehicles at any time. John Frary, Owner of Favret Heating and Cooling, Columbus, OH, confidently manages more than 40 vehicles using Mobile Control. John has safely and quickly recovered two stolen vehicles for his company, saving more than $60,000.

Generally, companies with good safety and few theft/damage incidents can receive lower insurance rates.

Improved Customer Service

By decreasing the amount of time drivers waste between stops and becoming better at forecasting estimated times for customers, you can greatly increase your customer satisfaction with GPS solutions. Greater customer satisfaction leads to more loyal customers and more customers recommending your business to friends and family. Also, advertising that you use a GPS tracking solution could increase business because it allows better service and safer transportation of goods.

" I would say that preventative maintenance is huge because I can set up alerts to let me know about upcoming services due and keep all of our records in one place. We absolutely keep our fleet running at maximum efficiency because of it."

Mark Robinson, Delivery Manager
Sunnyside Automotive Group, Cleveland, OH

About SageQuest

SageQuest provides GPS fleet tracking and management solutions that improve the efficiency and productivity of mobile workforces. Unlike other providers, we focus on delivering true business insight and the personal service you need to maximize your potential return. Our award-winning product, Mobile Control, provides a comprehensive set of tools and the flexibility to fit the needs of virtually any mobile workforce.

Why Consider SageQuest?

We separate ourselves from other providers with a best-in-class product and a service-driven model:

- In order to continually meet increased customer expectations, we regularly collect customer feedback and improve our product's capabilities based on customer needs and new technologies available.
- Our personal service extends from coordinating device installation in your vehicles through personalized training and ongoing support from our in-house customer care team.
- Our web services and integration options make Mobile Control more valuable by enabling it to share data with your on-site business applications.

We deliver proven benefits that create value across your entire business:

- Raise productivity across your entire fleet through increased driver accountability and improved fleet utilization.
- Reduce expenses by cutting excess fuel, payroll, maintenance and insurance costs.
- Increase safety and security of drivers, vehicles and vehicle contents.
- Improve your customers' satisfaction by shortening response times and providing more accurate status and arrival information.

Mobile Control from SageQuest

Mobile Control provides a comprehensive set of tools for vehicle tracking and management:

- Our industry-leading maps enable you to view and direct your fleet activities in real time.
- Flexible reports provide vehicle history including details on travel and stops, mileage, exceptions and more.
- Real-time alerts and automated reports inform you about important activities like speeding, off-hours operation and other unauthorized vehicle use.
- Mileage-driven preventative maintenance tools keep you in control of your service needs and maintenance investment. Straightforward routing helps you get your drivers where they need to be.
- Easily chart and browse key performance metrics across your entire fleet using groundbreaking Analytics tools.

Learn More About Your ROI with GPS Vehicle Tracking

At SageQuest, we understand that calculating ROI on a vehicle tracking investment works differently for every company. How you manage your business and your own priorities are just as big a factor as a few simple cost calculations.

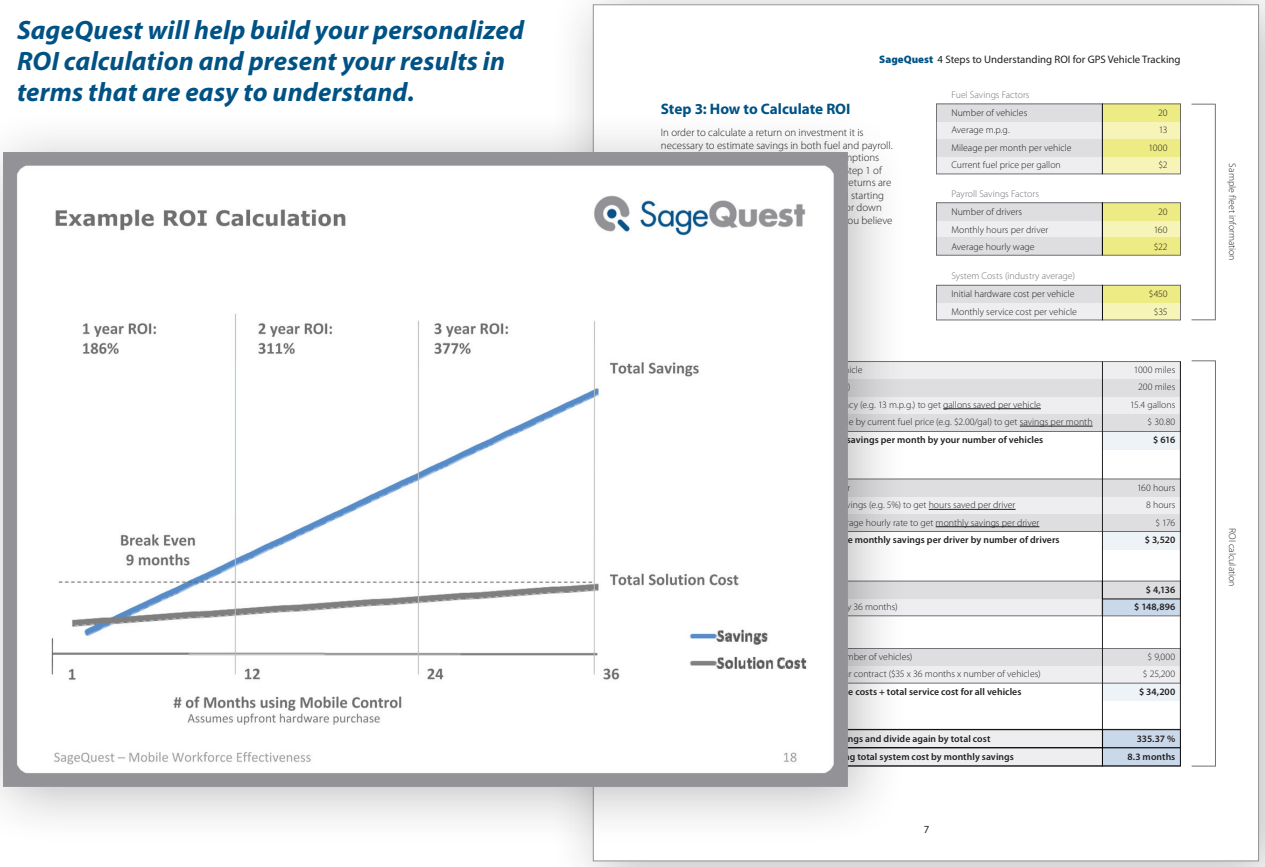
We happily take the time to work with potential customers on personalizing a business case. Going beyond the ROI percentage, we gather information from you and present key areas where your company will find improvement based on how your operation works every day.

STEP 1: During your initial conversation with SageQuest, we will talk about your current structure and situation within your mobile workforce. In order to understand the potential savings a GPS vehicle tracking system will bring to your organization, we help you set benchmarks for your current fuel and payroll expenses.

STEP 2: SageQuest will calculate an ROI based on your expenses and situation using relevant customer performance benchmarks.

STEP 3: SageQuest will come back to you with a customized ROI presentation that you can use internally to show others the value of our GPS vehicle tracking solution.

SageQuest will help build your personalized ROI calculation and present your results in terms that are easy to understand.



Call 888.837.7243 or visit www.sage-quest.com to sign up for a customized ROI briefing.

Tear Along Dotted Line

Complete this worksheet and tear it out to make copies or share your results with your colleagues.

Calculate Your Own ROI

In order to calculate a return on investment it is necessary to estimate savings in both fuel and payroll. Based on our experience with tens of thousands of vehicles in service today, the savings assumptions below are very achievable and should serve as a good starting point for your own calculations. Adjust up or down based on your specific situation and what you believe is realistic and conservative.

- Estimated Mileage Savings: 20%
- Estimated Payroll Savings: 10%

Sample fleet information

Fuel Savings Factors

Number of vehicles	
Average m.p.g.	
Mileage per month per vehicle	
Current fuel price per gallon	$

Payroll Savings Factors

Number of drivers	
Monthly hours per driver	
Average hourly wage	$

System Costs (industry average)

Initial hardware cost per vehicle	$
Monthly service cost per vehicle	$

Tear Along Dotted Line

ROI calculation

Monthly Fuel Savings

Start with your current miles per month per vehicle	miles
Apply your estimated mileage savings (e.g. 20%)	miles
Divide that number by your current fuel efficiency (e.g. 13 m.p.g.) to get gallons saved per vehicle	gallons
Multiply the number of gallons saved per vehicle by current fuel price (e.g. $2.00/gal) to get savings per month	$
Calculate your total fuel savings—multiply savings per month by your number of vehicles	**$**

Monthly Payroll Savings

Start with your current monthly hours per driver	hours
Multiply those hours by your estimated time savings (e.g. 5%) to get hours saved per driver	hours
Multiply the hours saved per driver by your average hourly rate to get monthly savings per driver	$
Calculate total payroll savings—multiply the monthly savings per driver by number of drivers	**$**

Total Savings Over 3 years

Total your monthly fuel and payroll savings	**$**
Multiply by the length of your contract (typically 36 months)	**$**

System Cost

Calculate your initial hardware costs ($450 X number of vehicles)	$
Calculate total service cost for the length of your contract ($35 x 36 months x number of vehicles)	$
Calculate total system cost—initial hardware costs + total service cost for all vehicles	**$**

ROI

Subtract your total cost from your total savings and divide again by total cost	**%**
Calculate time line for break even by dividing total system cost by monthly savings	**months**

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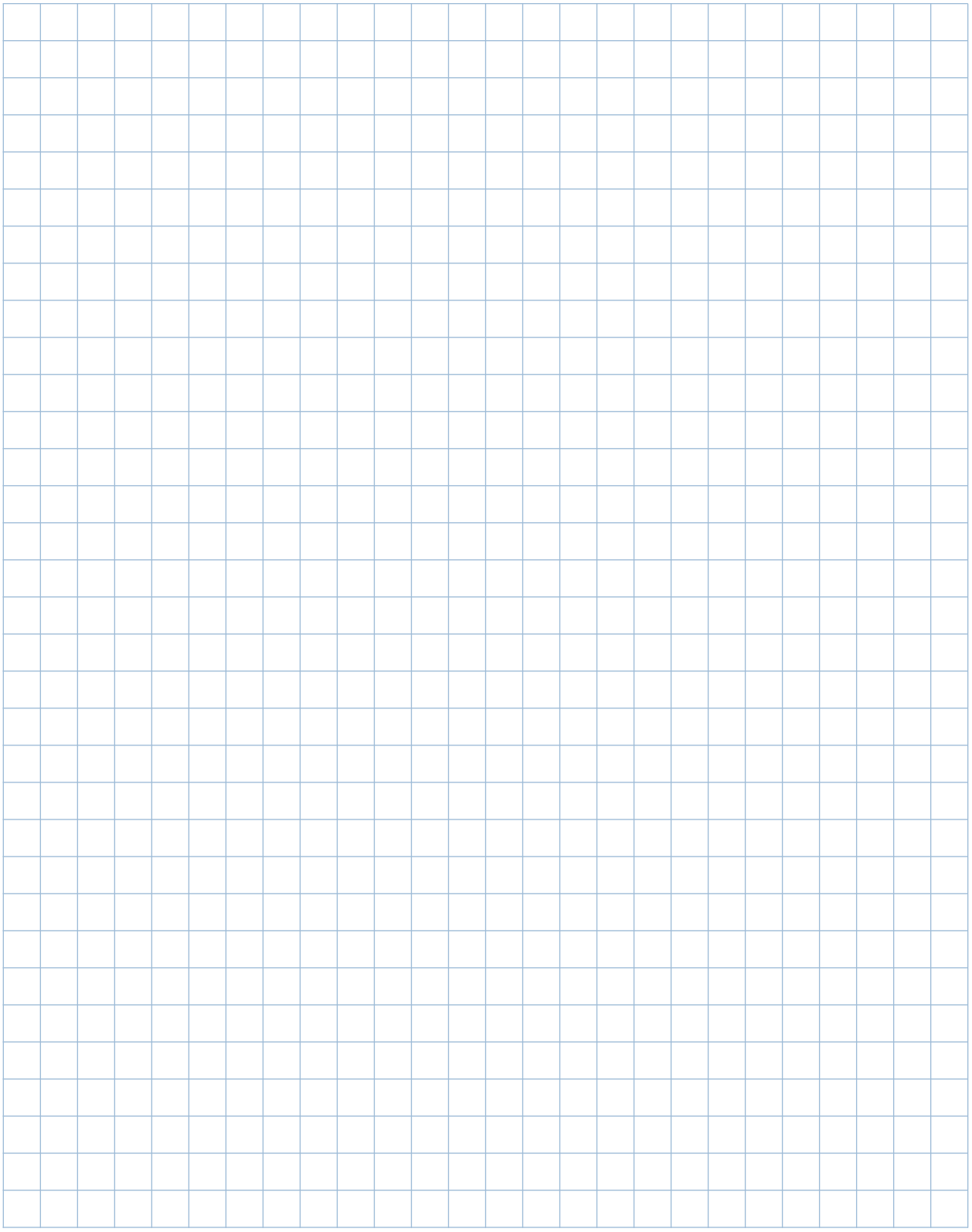

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