# Business Math Gross Pay 

## Competencies

## Resources

## HMH

## Standards

N.Q. 1
N.Q. 2
N.Q. 3
A.CED. 1
A.CED. 4
A.SSE. 1

National Standards for Personal Finance Education
Earning Income: 12-1a. Research potential income and employee benefit packages that are likely to be offered to new employees by various companies, government agencies, or not-for- profit organizations .

Earning Income: 12-4a . Identify different types of jobs and careers where wages and salaries depend on a worker's productivity and skills .

Earning Income: 12-4b . Explain why wages or salaries vary among employees in different types of jobs and among workers in the same jobs .

Earning Income: 12-7c . Differentiate between gross, net, and taxable income .

Earning Income: 12-11a . Evaluate the benefits and costs of gig employment, such as driving for a cab or delivery service .

## Vocab

Content: Straight-time pay Overtime pay Total Pay Salary Hourly rate Commission Piecework Semi-Annually Monthly Semi-Monthly Annually Quarterly
Academic: Evaluate Determine Calculate

## Business Math Gross Pay

## I can

I can research potential income.
I can identify different types of jobs and careers where wages and salaries depend on a worker's productivity and skills .

I can differentiate between gross and net pay.

I can explain the benefits and costs of gig employment.

I can explain why wages or salaries vary among employees in the same job.

I can explain why wages or salaries differ between employees in different jobs.

I can compare and contrast the potential income and benefits packages of different employers.

# Business Math Net Pay 

## Competencies

El.12.6a, El.12.7c

## Resources

HMH, Quizizz, Desmos, EdPuzzle

## Standards

El.12-6a: Calculate the amount of taxes a person is likely to pay when given information or data about the person's sources of income and amount of spending
El.12-7a: . Identify which level(s) of government typically receive(s) the tax revenue for income taxes, payroll taxes, property taxes, and sales taxes .
El. 12-7c: Differentiate between gross, net, and taxable income .

## I can

I can calculate the amount of taxes a person is likely to pay when given information or data about the person's sources of income and amount of spending.

I can explain the federal and state tax rates applicable to different sources of income .
I can differentiate between gross, net, and taxable income .

## Vocab

Content: Federal income tax State Income tax Social Security Medicare Voluntary deductions Deductions Benefits Group health insurance Witholding
Academic: Evaluate Determine Calculate

## Business Math Expenses

## Competencies

El.12.1c

## Resources

HMH, Quizizz, Desmos, EdPuzzle

## Standards

EEI: 12-1b . Develop a budget to allocate current income to necessary and desired spending, including estimates for both fixed and variable expenses.

Savings: 12-9d . Explain how the saving strategy "pay yourself first" can help people achieve their saving goals.

## I can

I can create a budget to keep track of my income and my spending habits.

I can use a budget to account for emergency situations.
I can create a budget that allows me to allocate my income to pay for both fixed and variable costs.

I can calculate how much the monthly amount of an annual expense will be.

## Vocab

Content: Budget Allocate Finances Budget Sheet Expenditures Fixed Expenses Annual Expenses Variable Expenses
Academic: Evaluate Calculate Determine

## Business Math Checking \& Savings Accounts

## Competencies

## Resources

HMH
El.12-1a

## Standards

Savings: 12-1a. Compare the features of regular savings accounts, money market accounts, and CDs .
Savings: 12-9d . Explain how the saving strategy "pay yourself first" can help people achieve their saving goals .

## Vocab

Content: Compound Interest Simple Interest Interest Rate Savings Account Checking Account Check Deposit Slip Automatic Transfer Debit Card Deposit Withdrawal Overdraft Stop Payment Check Register Bank Account Statement Reconciliation Account Statement Principal Balance
Academic: Evaluate Determine Calculate

## Business Math Checking \& Savings Accounts

## I can

II can compare savings accounts with different interests rates.
I can calculate the interest earned on savings accounts with differing interest rates.

I can calculate simple interest.

I can calculate compounding interest.

I can write a check to withdrawal money from my checking account.

I can fill out a deposit slip to deposit money into my savings account.

I can reconcile my check register with my bank account statement.

I can calculate the balance in a checking account after interest has been deposited.
I can calculate the balance in a bank account by adding deposits and subtracting withdrawals.

## Business Math Credit Cards \& Loans

## Competencies

## Resources

HMH

## Standards

Managing Credit: 12-1a . Describe how credit card grace periods, methods of interest calculation, and fees affect borrowing costs .
Managing Credit: 12-1b. Compare the cost of borrowing $\$ 1,000$ using consumer credit options that differ in rates and fees
MC: 12-6a . Identify examples of loans that may require down payments .
MC 12-6c . For a specified loan amount, compare the monthly loan payment with a $10 \%$ down payment versus a $20 \%$ down payment .
MC 12-6d. Explain how a down payment makes a borrower more attractive to a lender and motivates loan repayment by the borrower .
MC 12-8a . Identify the main factors that are included in credit score calculations .
MC: 12-8b . Explain how a borrower's credit score can impact their cost of credit and their ability to get credit .
MC 12-8c. Recommend ways that a person can increase their credit score .
MC 12-9a . Explain how landlords, potential employers, and insurance companies use credit reports and credit scores in decision- making .
MC 12-9b . Provide examples of benefits associated with having a good credit score .

## Vocab

Content: Credit Account Charge Account Credit Card Credit Score APR - Annual Percentage Rate Finance Charge Installment Loan Down Payment Amount Financed Repayment Schedule
Academic: Evaluate Determine Calculate

## Business Math Credit Cards \& Loans

## I can

I can calculate the finance charge on a credit card using the Average Daily Balance Method.
I can calculate the minimum monthly payment on a credit card.
I can calculate the amount of interest that will be paid on a credit card purchase.
I can calculate the total amount of interest that will be paid over the life of a loan.
I can calculate the monthly payment on an installment loan.
I can calculate the down payment on a loan.

I can explain how credit scores are calculated.
I can explain what lowers or raises a credit score.
I can explain the benefits or having a good credit score and the costs of having a bad credit score.
I can create a repayment schedule for an installment loan that shows the allocations of the monthly payment to interest and the principal.

## Business Math Buying a Vehicle

## Competencies

MR.12.7a

## Resources

HMH, Quizizz, Desmos, EdPuzzle

## Standards

Managing Risk 12-3b . Discuss why most states mandate auto liability coverage .
Managing Risk 12-4a. Research factors that result in lower auto insurance premiums.
Managing Risk 12-4b . Explain why taking a safe driving course can lower a driver's auto insurance premium .
Managing Risk 12-7a . Explain the primary types of losses covered by auto, homeowner's, and renter's insurance policies .

## I can

I can calculate the down payment on a vehicle.
I can compare prices for used cares and determine which is the better price.
I can create a monthly allocation chart for a car loan.
I can calculate the interest on a car loan.
I can compare prices for auto insurance and determine which is a better rate based on what my insurance needs are.
I can calculate the monthly cost of an insurance premium.
I can calculate the Average Retail Price and the Average Wholesale Price
I can calculate the Dealer's Cost of a Vehicle.

## Vocab

Content: Base Price Sticker Price Options Destination Charge Dealer's Cost Used-Vehicle Guide Average Retail Price Average Wholesale Price Amortization Liability Insurance Collision Insurance Comprehensive Insurance Personal Injury Protection Rental Reimbursement Insurance Gap Insurance Uninsured/Underinsured Motorist Insurance
Academic: Evaluate Calculate Determine

# Business Math Student Loans 

## Competencies

## Resources

HMH
C.12.5a, C.12.5c

## Standards

Credit 12-4a: Describe the different sources of funding for post- secondary education .

Credit 12-4b: Explain the role the FAFSA plays in applying for college financial aid .
Credit 12-5a: Compare federal and private student loans based on interest rates, repayment rules, and other characteristics

Credit 12-5c: Estimate total interest on various student loans based on interest rates and repayment plans.

## Vocab

Content: Student Loan Federal Student Loan Private Student Loan Subsidized Unsubsidized Dependent Student Independent Student Eligibility Aggregate Student Loan Limits Loan Fees Disbursement
Academic: Evaluate Determine Calculate

## Business Math Student Loans

## I can

Il can describe the different sources of funding for college.
I can explain the role of FAFSA in college financial aid.

I can compare federal and private student loans based on interest rates, repayment options, and other characteristics.

I can calculate the total interest on student loans based on interest rates and length of the loans.

I can calculate the minimum monthly payment on a student loan.

I can calculate the estimated total yearly cost of college.
I can determine the annual federal student loan limits for different students based on year and dependency status.

I can calculate the loan fees on a federal student loan.

# Business Math Buying a House 

## Competencies

## Resources

S.12.6b, C12.3c, C.12.6b, c.12.6C

## HMH

## Standards

Spending 12-6a. Identify financial and personal reasons that younger adults often choose to rent a home instead of buying.
Spending 12-6b . Compare the short-term and long-term costs and benefits of renting versus buying a home in their city of residence.
Credit 12-3a . Identify the type of collateral required for a mortgage loan.
Credit 12-3b . Differentiate between adjustable-rate and fixed-rate mortgages.
Credit 12-3c. Compare monthly mortgage payments for loans that differ in repayment period, amount borrowed, and interest rate.
Credit 12-6b. Given the price of a home, estimate the amount of down payment required.
12-6c. For a specified loan amount, compare the monthly loan payment with a $10 \%$ down payment versus a 20\% down payment.
Credit 12-6d. Explain how a down payment makes a borrower more attractive to a lender and motivates loan repayment by the borrower.
Managing Risk 12-3a. Explain why homeowners' insurance is required by a lender when a homeowner takes out a mortgage .

## Vocab

Content: Mortgage Down Payment Closing Costs Ammortization Repayment Schedule Fire Protection Class Annual Premium Security Deposit
Academic: Calculate Compare Contrast Evaluate Determine

## Business Math Buying a House

## I can

I can calculate the monthly mortgage payments for loans with different amounts, interest rates, and repayment period.

I can calculate the down payment of a house based on price.

I can compare and contrast the costs and benefits of renting vs. owning a house.

I can explain why having a down payment makes lenders more wiling to loan a person money.

I can discuss why younger adults are more likely to rent instead of own.

# Business Math Taxes 

## Competencies

El.12.7c, El.12.6a, El.12.8b, El.12.9a, El.12.9c

## Resources

irs.gov,_1040 Form, l-9 Form, W-4 Form, W-2 Form, 1099 Form

## Standards

Earning Income 12-7a . Investigate the federal and state tax rates applicable to different sources of income. Earning Income 12-6a. Calculate the amount of taxes a person is likely to pay when given information or data about the person's sources of income and amount of spending .
Earning Income 12-6b . Identify which level(s) of government typically receive(s) the tax revenue for income taxes, payroll taxes, property taxes, and sales taxes.
Earning Income 12-6c . Describe the benefits they receive, or may receive in the future, from governmentcollected tax revenue.
Earning Income 12-7c . Differentiate between gross, net, and taxable income
Earning Income 12-7d. Explain why some income is reported on an IRS Form W-2 and some is reported on an IRS Form 1099, and how that could affect their taxes.
Earning Income 12-8a. Explain the difference between earned and unearned income.
Earning Income 12-8b . Compare the tax rates assessed on earned income, interest income, and capital gains income.
Earning Income 12-9a. Complete IRS Form W-4 .
Earning Income 12-9b. Explain the difference between a tax credit and a tax deduction.
Earning Income 12-9c . Identify several examples of tax credits, determining whether they are refundable or nonrefundable, and the groups of people who benefit most from each type.

## Vocab

Content: W-4 W-2 10401099 Capital Gains I-9 Dependent Earned Income Unearned Income
Academic: Evaluate Determine Calculate

## Business Math Taxes

## I can

I can calculate the amount of taxes a person is likely to pay when given information or data about the person's sources of income and amount of spending .

I can explain the federal and state tax rates applicable to different sources of income .

I can calculate the taxes on earned income, interest income, and capital gains income.

I can explain the federal and state taxes that apply to various sources of incomes.

I can read, interpret, and fill out information on a W-4.

I can read and interpret a W-2.
I can use a W-2 to fill out a 1040 tax form.

# Business Math Shopping 

## Competencies

S.12.7b, S.12.1b, S.12.3b

## Resources

## Standards

Spending: 12-7b . Compare sales tax rates paid on different types of goods in their state and for online purchases.
Spending: 12-1a . Identify their short-term and long-term financial goals.
Spending: 12-2b. Describe a process for making an informed consumer decision.
Spending: 12-3a . Explain the factors to evaluate when buying a durable good.
Spending: 12-3b. Analyze the cost and features of three competing products or services.
Spending: 12-4b. Describe how inflation affects purchase decisions and the price of goods and services.
Spending: 12-5a . Explain how pre-purchase research encourages consumers to avoid impulse buying.
Spending: 12-12a . Evaluate the costs and benefits of buying an extended warranty on a specific item (e .g .
cellphone, laptop, or vehicle) considering the likelihood of product failure, cost of replacing the item, and price of the warranty.
Spending: 12-12b. Explain how extended warranties or service contracts are similar to and different from insurance .

## Vocab

Content: Sales tax Warranty Discount Markdown Value Allocate Variable Expenses Fixed Expenses Consumer Unit Price
Academic: Evaluate Determine Calculate

## Business Math Shopping

## I can

I can calculate the the sales tax on various items.

I can compare a product from three different brands and determine the best value.

I can calculate discounts and markdowns on an item.

I can calculate the unit price of an item.

# Business Math Investments 

## Competencies

## Resources

invest.or.gov, Khan Academy

## Standards

Investing: 12-3a . Discuss the advantages and disadvantages of investing in riskier assets .
Investing: 12-5b . Predict what could happen to the price of a stock if new information is reported about the company or its products .

Investing: 12-6b . Discuss the pros and cons of investing in a diversified mutual fund versus investing in a small number of individual stocks.

Investing: 12-8c . Investigate the contribution limits and tax advantages of a traditional IRA versus a Roth IRA .
Investing: 12-11c . Identify the advantages and disadvantages of robo- advising and other investment-related financial technologies.

Investing: 12-11a . Discuss how the development of financial technology has made it easier for people of all income and education levels to participate in financial markets .

## Vocab

Content: Investment Traditional IRA Roth IRA Retirement Shares Stock Certificate Loss Profit Certificate of Deposit Compound Interest Dividends Return on Investment Annual Percentage Yield
Academic: Evaluate Determine Calculate

## Business Math Investments

## I can

I can compare and contrast Traditional vs. Roth IRA's and employer matching retirement accounts.

I can use an online calculator to calculate how much money a person will need to have saved to maintain the same standard of living after they retire.

I can use an online calculator to calculate how much money needs to be saved each month in order to reach retirement goals.

I can calculate the return on investment for stocks.

I can explain what causes a companies stock prices to go up and down.

I can calculate the total price of buying/selling stocks.

## Business Math Health Insurance

## Competencies

## Resources

MR.12.5b, MR.12.5c

## Standards

Managing Risk: 12-5b . Compare the cost of health insurance to the potential financial consequences of not having health insurance.
Managing Risk: 12-5c . Estimate the effect on different health insurance deductibles and coinsurance rates on out-of pocket medical costs.
Managing Risk: 12-5a . Discuss the advantages of obtaining health insurance coverage through an employer plan versus buying private insurance or being uninsured.
Managing Risk: 12-8b. Discuss the benefits and costs of purchasing life insurance on the primary earners in a household.

## I can

I can explain the benefits of health insurance and the risks of not having health insurance.
I can calculate coinsurance on a medical bill.
I can calculate how much a medical bill will cost the insured party given coinsurance rates, deductibles, and out of pocket maximums.
I can calculate the monthly payment on a health/life insurane policy.

## Vocab

Content: Annual Premium Coinsurance Whole Life Insurance Term Life Insurance Insured Premium Face Value Insurer Death Benefit Beneficiary Deductible Copay Coinsurance Provider Out Patient Out-Of-Network Provider Out of Pocket Maximum Fee Schedule Reasonable and Customary Fees Claims Exclusion Pre-Existing Condition Waiting Period
Academic: Evaluate Calculate Determine

## Business Math Side Hustles/Gig Economy

## Competencies

## Resources

El.12.11a

## Standards

Earning Income: 12-11a Evaluate the benefits and costs of gig employment, such as driving for a cab or delivery service.
Earning Income: 12-11b Discuss the pros and cons of small business ownership as their primary source of income.

## I can

I can calculate the costs and profit of a side hustle or gig.
I can estimate the number of viewers I would need to make various incomes on Youtube.
I can calculate how much profit I could make using DoorDash/Uber/Etsy/Fiverr.
I can explain how to market my side hustle.

## Vocab

Content: Profit Loss side hustle shipping costs viewers ad revenue sponsorships target market advertising benefits drawbacks
Academic: Evaluate Calculate Determine Estimate Compare/Contrast

