

## Math-in-CTE Curriculum Map: Business

CTE Course/Unit	CTE Concepts or Applications	Embedded Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
Credit/Credit Cards	Cost of credit; Interest rates; Credit ratings; Management of debt; Payment options	Percentages; Linear functions; Proportions	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4; 6.RP.1; 7.RP.1; 7.RP.2; 7.RP.3	A.CED.1; A.CED.2; A.CED.3; A.CED.4; A.REI.3; A.REI.4; A.REI.10; F.LE.1; F.LE.2; F.LE.5; F.IF.5; A.SSE.1; F.BF.1; S.ID.6
Credit/Student Loans	Cost of credit; Interest rates; Payment options; Management of debt	Percentages; Linear functions	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4	A.CED.1; A.CED.2; A.CED.3; A.CED.4; A.REI.3; A.REI.4; A.REI.10; F.LE.1; F.LE.2; F.LE.5; F.IF.5; A.SSE.1; F.BF.1; S.ID.6
Simple Interest	Calculating simple interest; Calculating monthly payments	Changing decimals to percent; Substituting data into formulas; Basic math operations	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.EE.2	A.CED.4
Compound Interest	<b>Calculating compound interest; Types of</b>	<b>Percent; Ratio; Exponents; Graphing;</b>	6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.RP.1; 6.RP.2;	G.MG.3; F.BF.5; S.ID.6; F.LE.2; F.LE.3; S.IC.1; S.IC.2; S.IC.3;

	<b>investment; Opportunity Cost; Diversification</b>	<b>Rounding; Order of operations; Substituting data into formulas; Solving formulas; Charts; Decimals</b>	6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.EE.1; 8.EE.1; 8.EE.2; 8.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4; 6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4	S.IC.4; S.IC.5; S.IC.6; S.ID.1; A.CED.1; A.CED.2; A.CED.3; A.CED.4; A.REI.3; A.REI.4; A.REI.10; F.LE.1; F.LE.2; F.LE.5; F.IF.5; A.SSE.1; F.BF.1
Payroll	Calculating rate of pay; Regular vs. overtime pay; Gross pay vs. net pay; Taxes	Percentages; Changing decimals to percent; Solving equations	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4	A.CED.1; A.CED.2; A.CED.3; A.CED.4; A.REI.3; A.REI.4; A.REI.10; F.LE.1; F.LE.2; F.LE.5; F.IF.5; A.SSE.1; F.BF.1; S.ID.6
Payroll Deductions	Types of payroll deductions; W-4 Form; Exemptions; Filing status	Percentages; Comparisons; Graphing; Variables (dependent and independent)	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Excel Functions	Using basic and advanced Excel functions; Excel formulas; Building templates; Charts & graphs; Linking data	Frequency distribution; Changing percents to decimals; Add, subtract, multiply, & divide; Charts	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1

Excel	Developing a family budget; Excel formulas; Templates; Variables; Using different MS Office applications	Percentages; Graphs; Changing money to percent; Mean, mode, and median; Comparisons; Estimation	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4; 6.SP.1; 6.SP.2	S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1; S.ID.2
Mortgages	Calculating mortgage payments; Interest rates; Down payment; Assessed value/Loan value	Percentages; Comparisons; Ratios	6.RP.2; 6.RP.3; 7.EE.2; 6.RP.1; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3	G.MG.3
Accounting Equation	Accounting equations; Effects of transactions on accounting equation	Charts; Graphs; Comparisons; Missing elements; Additive inverse	6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Financial Statements	Income statement; Revenue; Expenses; Profit/loss; Problem solving Charts	Percentages; Graphs; Changing money to percent; Ratios	6.RP.2; 6.RP.3; 7.EE.2; 6.RP.1; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	G.MG.3; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Merchandise Discounts	Calculating discounts	Percentages; Rounding; Mental math; Estimating; Word problems; Compound discount	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3	N.Q.1; N.Q.2; N.Q.3; S.ID.6

Financial Statements	Balance sheet; Assets, liabilities, and owner's equity	Percentages; Comparisons; Ratios	6.RP.2; 6.RP.3; 7.EE.2; 6.RP.1; 7.RP.1; 7.RP.2; 7.RP.3; 7.EE.3	G.MG.3
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