

Math-in-CTE Curriculum Map: Finance

CTE Course/Unit	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
Business structure	Business structures- corporations	Adding/ subtracting/ multiplying whole numbers; Reading tables; Rounding; Adding, subtracting, and multiplying decimals	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.5; 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	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Financial analysis	Salary calculations	Whole number operations; Algebraic formulas	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.EE.2; 7.EE.1; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.REI.1; A.REI.2
	Analyzing basic; Accounting equations ($A=L+O.E.$)	Inverse operation; Solving for variables; Algebraic equations	6.EE.2; 7.EE.1; 7.EE.2	A.REI.1; A.REI.2
	Cost center analysis	Formulas; Whole numbers; Linear graphs & charts	6.NS.2; 6.NS.3; 7.NS.1; 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.EE.2; 7.EE.1; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.REI.1; A.REI.2; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1

	Figuring notes and interest	Substituting data into formulas; Percents; Solving equations and decimals; Algebraic equations	6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.3; 6.EE.2; 7.EE.2; 6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.1; 7.EE.2; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4	A.REI.1; A.REI.2 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
Scheduling	PERT diagram (program, evaluation, & review techniques)	Time estimation; Charts & graphs; Arcs, nodes, and networking	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
Technology	Excel spreadsheet and pie chart	Percentages; Analyzing & interpreting data	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.RP.2; 6.RP.3; 7.EE.2; 7.EE.3	S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Economic measurement & globalization	Economic decisions	Tables & charts; Basic math operations	6.NS.2; 6.NS.3; 7.NS.1; 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	A.APR.1; A.APR.7; N.RN.3; N.Q.1; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1

International trade/currency exchange rate		Conversions, exchange rate; Ratio/proportion; Reading charts and tables; Estimation; Basic math operations	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.RP.1; 6.RP.2; 6.RP.3; 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.4; 8.SP.3; 8.SP.4	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.MG.3 S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Finance (profit & loss and budgeting)	Depreciation – double declining	Formulas; Decimals; Percent; Exponential decay; Linear relationships	6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.3; 6.EE.2; 7.EE.1; 7.EE.2; 6.EE.1; 8.EE.1; 8.EE.2; 8.EE.3; 6.EE.6; 6.EE.7; 6.EE.8; 6.EE.9; 7.EE.4; 8.EE.7; 8.EE.8; 8.F.4	A.REI.1; A.REI.2; F.BF.5; S.ID.6; F.LE.2; F.LE.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
	Gross sales margins; Markup calculations	Basic arithmetic; Decimals; Percentages	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1
	Incomes/expenses			

	Stock gains/losses	Adding/subtracting; Multiplying and dividing; Percents; Fractions; Breakeven points	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.NS.1; 6.EE.2; 7.NS.1; 7.NS.2; 7.NS.3; 8.G.6; 8.G.7; 8.G.8	A.APR.1; A.APR.7; N.RN.3; N.Q.1; G.SRT.6; G.SRT.8; F.IF.8
	Franchising fees	Adding/subtracting; Multiplying and dividing; Rational numbers; Calculating with percentages	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Business operations	Decision making	Percents; Graphs; Proportions; Probability; Problem solving	6.RP.2; 6.RP.3; 7.EE.2; 7.EE.3; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 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; N.Q.1; N.Q.2; N.Q.3; S.ID.6
	Timecards	Time; Rounding; Adding; Multiple decimals; Order of operations; Substitute formulas and solve	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.EE.2; 7.EE.1; 7.EE.2; 6.EE.2;	A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.REI.1; A.REI.2; A.CED.4
	Payroll deductions/register	Basic operations with whole numbers and decimals; Estimation; Rounding; Converting percentages to decimals	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.2; 6.NS.3; 6.NS.5; 7.NS.1; 7.NS.2; 7.NS.3; 6.RP.2; 6.RP.3; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1