

LCTC Embedded Mathematics General/Common Competencies

ID #	Topic	Show-Me Standards	MO Grade Level Expectations	NCTM Standard
1	Integers			
1a	Order of Operation	MA1, MA5	N2B9,N2C9	2A
1b	Basic operations (+, -, *, /)	MA1, MA5	N2B8,N3C8	2A,3A
1c	Word Problems	MA1, MA5,G3-4	N2D10,N2D9	2A,3A,3B,18A,18B,18C,18D
1d	Calculator Operations	MA1, MA5	N2D10,N3C9	2A,3A,3B,18A,18B,18C,18D
1e	Personal/Business Finance	MA1, MA5, G4-8,G3-8,	N2D10,N3B9,N3D10	20A,20B,22A,22B,22C
2	Fractions, Decimals, and Percent			
2a	Basic operations decimals	MA1, MA5	N2B6,N2B7,N2B8,N2C9	2A,3A
2b	Basic operations fractions	MA1, MA5	N2B6,N2B7,N2B8,N2C9	2A,3A
2c	Conversions (f – d) (d- f) (f, d - %) (% - f, d)	MA1, MA5	N2B6,N2B7,N2B8N2C9,N1B5,N1B6	2A,3B
2d	Estimations	MA1, MA5	N3D12,N3D8	3B
2e	Applications (Personal/business finance)	MA1, MA5, G4-8,G3-8,	N2B6,N2B7,N2D10,N3D12	2A,3A,3B,18A,18B,18C,18D,20A,20B,22A,22B,22C
4	Ratio and Proportion			
4a	Write and interpret	MA5, MA6	N3E10,N3E8,N2D9	2A,3A
4d	Basic operations	MA5, MA6	N3E10,N3E8,N2D9	2A,3A
4c	Applications	MA5, MA6,G3-4	N3E10,N3E8,N2D9	2A,3A,20A,20B
4d	Calculator	MA5, MA6	N3E10,N3E8,N2D9	2A,3A,20A,20B
8	Units of measure			
8a	Conversion within systems	MA1,MA2	M1A5,M1B5,M2E5,M2E6,M2E7	12A
8b	Conversion between systems	MA1,MA2	M1A5,M1B5,M2E5,M2E6,M2E7	12A
8c	Reading tools of measurement	MA1,MA2	M1A5,M1B5	12A
8d	Measurement	MA1,MA2,G3-4	M1A7,M1C7	12A,13A,13D,18A,22A
8e	Accuracy, precision, tolerance	MA1,MA2	M2D10	13A
8f	Estimation	MA1,MA2,G3-8	N3D10,M2A6,M2D10,	12A,13A,13D,18A,22A

Key for mathematics topic cross alignment: Cross-referencing the mathematics topics to the Missouri Show-Me Standards, the Missouri Grade-Level Expectations, and the NCTM Standards will allow instructors to find resource materials and teaching strategies that relate the various standards to the CTE classrooms.

Missouri Grade-Level Expectations: The format used is a letter that corresponds to the STRAND, the number of the “BIG IDEA,” the letter of the CONCEPT LEVEL, followed by the grade level. An example is Strand, Big Idea, Concept Level, Grade Level: N1A9 is (1) Number and Operations, (1) Understanding numbers, ways of representing numbers, relationships among numbers and number systems, (9) ninth grade. The STRAND names are abbreviated as follows:

Numbers and Operations: N

Algebraic Relations: A

Geometric and Spatial Relationships: G

Measurement: M

Data and Probability: D