

4

Calculate the Percentage of the Total Possible Points for Identified Power Standards

Insert for Process Step 4

- Now that you have identified the “big ticket” areas and power standards for each subject area, let’s calculate the percentage of the subject area score that these account for. Let’s look at an example using sixth grade mathematics. You will still be using the Score Distribution pages of the report. Remember to do these calculations using your data.

Mathematics Score Distribution

GLCE Code	FOCAL POINT Abbreviated GLCE Descriptor	No. of Students Assessed	Mean Points	Points Possible	Percent of Students Scoring			
					0	1	2	3
	Decimal, Fraction Operations	73	3.9	10				
N.FL.05.14	Add and subtract fractions with unlike denominators	73	0.7	2	59	15	26	
N.FL.05.18	Write statements involving + and - of fractions	73	0.7	2	44	38	18	
N.FL.05.20	Solve applied problems using fractions & decimals	73	0.9	2	33	48	19	
N.MR.05.19	Solve contextual problems involving +/- fractions	73	0.7	2	56	21	23	
N.MR.05.21	Solve for the unknown in equations with fractions	73	1.0	2	34	34	32	
	Whole-Number Division	73	12.6	23				
N.MR.05.01	Understand the meaning of division of whole numbers	73	1.5	2	14	25	62	
N.MR.05.02	Know division of whole numbers in form $a = bq + r$	73	1.2	2	22	37	41	
N.MR.05.03	Write mathematical statements involving division	73	1.3	2	22	25	53	
N.FL.05.04	Multiply a multi-digit number by a two-digit number	73	1.5	2	14	22	64	
N.FL.05.05	Solve problems involving \times and \div of whole numbers	73	0.9	2	23	64	12	
N.MR.05.15	\times a whole number by powers of 10, identify patterns	73	1.3	2	11	47	42	
N.MR.05.17	Multiply decimals to 100ths by whole numbers	73	1.9	3	10	22	34	34
M.UN.05.01	Know equivalence of 1 liter, 1000 ml and 1000 cc	73	0.9	2	30	52	18	
M.UN.05.02	Know the units of measure of volume	73	0.5	2	52	44	4	
M.UN.05.03	Compare relative sizes of cubic measures	73	0.4	1	62	38		
M.UN.05.04	Convert measurements within a given system	73	1.2	3	27	36	29	8
	Properties of 2D Shapes/Angles	73	5.6	11				
G.GS.05.02	Measure angles with a protractor and classify	73	2.2	3	8	15	23	53
G.GS.05.03	Identify angles on a straight line & vertical angles	73	0.4	1	62	38		
G.GS.05.04	Find unknown angles in problems	73	1.5	3	19	33	27	21
G.GS.05.05	Know straight angle and angles surrounding a point	73	0.6	2	51	41	8	
G.TR.05.01	Associate an angle with a certain amount of turning	73	0.9	2	34	40	26	
	Connections	73	8.2	16				
N.ME.05.08	Understand the relative magnitude base-10 system	73	0.1	1	55	5		
N.ME.05.10	Understand & show fractions as a statement of \div	73	1.4	2	16	23	60	
N.ME.05.11	Compare two fractions using common denominators	73	1.8	3	18	21	26	36
N.ME.05.12	Multiply two unit fractions using area model	73	1.1	2	12	70	18	
N.MR.05.13	Divide using fractions and whole numbers	73	0.5	1	45	55		
M.PS.05.10	Solve volume problems of rectangular prisms	73	0.9	2	42	25	33	
D.RE.05.01	Read and interpret line graphs, and solve problems	73	1.0	3	34	32	32	3
D.RE.05.02	Construct line graphs from tables of data	73	1.4	2	14	33	53	

- a. First, add the points possible for the domains, focal points and disciplines identified in the previous step. For math, the total points possible for the focal points Connections and Whole-Number Division add up to 39.

$$23 + 16 = 39$$

- b. Next, add the total points possible for all of the math focal points, i.e., Connections, Whole-Number Division, Decimal-Fraction Operations and Properties of 2D Shapes/Angles. The possible points for all four math focal points add up to 33.

$$10 + 23 + 11 + 16 = 60$$

- c. Use a calculator to divide the total from Step 4a by the total from Step 4b to calculate the percentage of the total score that the identified domains are worth. You can multiply your answer by 100 to get it into a percent format.

$$1) 39/60 = .65 \qquad 2) .65 \times 100 = 65\%$$

- d. Therefore, assessment items related to the two highlighted focal points (and their associated power standards) make up 65% of the score for the math portion of the sixth grade MEAP!
2. Do the calculations the same way for each subject area assessed at your grade level.
 3. Repeat these steps for Students with Disabilities and All Except Students with Disabilities, if appropriate to your situation. This data is found on pages 3 – 6 of the Summary Report. Remember that data for subgroups will only show when there are 10 or more students tested.
 4. Locate the Elementary School Power Standards Summary document in the inserts to view all of the big ticket domains, disciplines and focal points at the elementary level since 2009. You'll see that although the percentages may have changed slightly, the areas have remained relatively consistent. You'll also notice that in most of the cases the percentages account for 45% or more of the total score! Thinking ahead...where do you think you should spend more instructional time?