Algebra I	
2012-2013	2014-2015
GLE 8 Use order of operations to simplify or rewrite variable	A.SSE.A.02 Use the structure of an expression to identify ways to rewrite it. For
expressions (A-1-H)(A-2-H)	example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$ , thus recognizing it as a difference of squares that
	can be factored as $(x^2 - y^2)(x^2 + y^2)$ .
What is the simplified form of this expression?	Teresa is simplifying an expression.
	step 1: $\sqrt{4x^2}$
4(2x-5y)-3x	step 2: <b>?</b>
	step 3: 2 <i>x</i>
A. $5x - 5y$	What should Teresa add at step 2 to best complete the process?
B. $5x - 20y$	
C. $-11x - 5y$	A. $\sqrt{(2x)^2}$
D. $11x - 20y$	B. $2\sqrt{2x^2}$
	C. $xV4x$
	$\int \nabla \left[ \frac{1}{2} + 2 \right] \left[ \frac{1}{2} + x \right]$
GLE 25 Explain slope as a representation of "rate of change" (G-3-	<b>FIEP OF</b> Interpret the parameters in a linear or expendential function in terms of a
H)(A-1-H)	<b>F.LE.B.05</b> Interpret the parameters in a linear of exponential function in terms of a
	context.
The cost, in dollars, of printing <i>n</i> digital photos is 1.50 + 0.20 <i>n</i> .	Laniqua trains for the long jump each week. She writes this function to model the
Which statement is correct?	relationship between the number of weeks, w, she trains and the distance, f(w), she
	can jump.
A. For each additional photo printed, the cost increases by \$0.20.	f(w) = 2w + 180
B. For each additional photo printed, the cost increases by \$1.30.	
C. For each additional photo printed, the cost increases by \$1.50.	What does the slope of this function represent?
D. For each additional photo printed, the cost increases by \$1.70.	
	A. the number of inches Laniqua can jump when she begins training
	B. the number of weeks it takes Laniqua to improve her jumping
	C. the number of weeks it takes Laniqua to increase her jump distance by 1 inch
	D. the number of inches Laniqua's jump distance increases per week of training

GLE 37 Analyze real-life relationships that can be modeled by linear functions (P-1-H)(P-5-H)	<b>F.IF.A.02</b> Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
<ul> <li>The perimeter of a regular octagon is modeled by the function P = 8s, where s is the length of each side. The perimeter of a certain regular octagon is 5 meters. What is the length of each side?</li> <li>A. 0.625 meter</li> <li>B. 1.6 meters</li> <li>C. 3 meters</li> <li>D. 40 meters</li> </ul>	<ul> <li>Vincent goes to the gym for 30 minutes every day. He starts a new exercise routine on a Monday and uses a function to model the amount of calories he has used, f(d), as a function of the number of days, d, he has exercised with the new routine.</li> <li>Which statement represents a correct interpretation of f(d)?</li> <li>A. f(5) = 150 means Vincent has exercised for a total of 150 minutes after the fifth day of exercising with his new routine.</li> <li>B. f(10) = 3,500 means Vincent will use 3,500 calories on day 10 of exercising with his new routine.</li> <li>C. f(15) = 5,250 means after 15 days of exercising with his new routine, Vincent has used 5,250 calories.</li> <li>D. f(30) = 10,500 means the number of calories Vincent has used times 30 is equal to 10,500.</li> </ul>