G.1.C - Use d	leductive	e reasoning to prove that a valid geometric statement is	s true.
Standard	Difficult	Question/Task	Answer/Work
	2	<ul> <li>9. □LPT is an obtuse scalene triangle. If □P is the obtuse angle in □LPT, which of the following is not a valid conclusion?</li> <li>a. m□L + m□T □LPD</li> <li>b. m□P + m□T □L90°</li> <li>c. m□L + m□T □L90°</li> <li>d. m□L + m□P + m□T □L180°</li> </ul>	<ul> <li>a. student may think that an obtuse angle is <sup>3</sup> 90° which could make this statement true and/or the student didn't realize that it was an obtuse scalene triangle.</li> <li>b. correct</li> <li>c. student may think that an obtuse angle is <sup>3</sup> 90°</li> <li>d. student may not understand the context of the problem and found a valid conclusion</li> </ul>
G.2.A Know	prove. ai	l nd apply theorems about parallel and perpendicular lin	l es.
	2	<ul> <li>Mary knows that line <i>m</i> is ⊥ to line <i>q</i>. Mary says that line <i>m</i> is    to line <i>n</i>.</li> <li>If Mary correct?</li> <li>If Mary is correct, show why she is correct using words, numbers, and/or diagrams.</li> <li>If Mary is incorrect, what additional information does Mary need in order to state that line <i>m</i> is    to line <i>n</i>?</li> </ul>	<ul> <li>The student shows understanding of <i>theorems</i> <i>about parallel and</i> <i>perpendicular lines</i> by doing the following: <ul> <li>Writes that Mary is incorrect</li> <li>Shows that line <i>n</i> is also 1 to line <i>q</i></li> </ul> </li> </ul>

G.2.B Know, prove, and apply theorems about angles, including angles that arise from parallel lines intersected by					
a trai	nsversal.	Our office / Teach	A		
Standard	y	Question/lask	Answer/work		
	1	In the figure below, the value of $y =$	y=105		
		m 105° V°			

G.3.A - Know, explain, and apply basic postulates and theorems about triangles and the special lines, line segments,

Standard Difficult	Question/Task	Answer/Work
2	5. Triangle ABC is similar to triangle DEC. Which statement is true: A $e^{C}$	<ul> <li>a. correct</li> <li>b. student is making an assumption based on the diagram that cannot be proven with the information given</li> <li>c. student didn't correctly 'align' the similar triangles, therefore the congruency statement is false</li> <li>d. student is making an assumption based on the diagram that cannot be proven with the</li> </ul>
G3C-Use the pro	uperties of special right triangles (30 - 60 - 90 and 45	information given
	<ul> <li>A rhombus is shown below. Which of these is closest to the height, h, of the rhombus?</li> <li> <ul> <li>1 inch</li> <li><i>h</i></li> </ul> </li> <li>a. 0.5 b. 0.9 c. 1.0 d. 1.7</li> </ul>	<ul> <li>a) found the side opposite the 30° angle</li> <li>b) correct</li> <li>c) found the hypotenuse - may have a misconception about properties of altitudes of rhombuses.</li> <li>d) didn't understand the relationship of the √3 in the 30-60-90 relationship</li> </ul>

G.3.D - Know, prove	.D - Know, prove, and apply the Pythagorean Theorem and its converse.				
1	10. Triangle <i>XYZ</i> is shown below.	a. Assume that the missing			
	What is the length of XY?	side has be shorter than			
	a. 9 cm b. $\sqrt{65}$ cm c. $\sqrt{75}$ cm d. $\sqrt{116}$ cm	<ul> <li>10 cm, but longer than 5 cm, not seeing the connection to using the Pythagorean Theorem</li> <li>b. correct</li> <li>c. Assumed that Y was a 90° angle</li> <li>d. Didn't account that 10 cm was the length XZ and to get the answer you need to subtract out the piece from the height of the triangle to Z.</li> </ul>			
	In a right triangle, one leg measures 24cm and	Hypotenuse = 26cm.			
1	the other leg measures 10cm. What is the				
	length of the hypotenuse?				

## Geometry EOC Review Dec 17 - 21 Name:

G.3.C Use the properties of special right triangles (30°–60°–90° and 45°–45°–90°) to solve problems.						
G.3.D Know, prove, and apply the Pythagorean Theorem and its converse.						
G.3.E Solve	G.3.E Solve problems involving the basic trigonometric ratios of sine, cosine, and tangent.					
G.7.B Select	Difficult	y strategies to solve problems.	Answer/Work			
otandara	У	2 Vield eign has a shape of an equilatoral	a) divided 26 by root 2			
	2	triangle with side length of 36 inches	a) divided 36 by 1001 3 b) 18 * root 2			
	-		c) correct answer			
		What is the height of the sign?	d) 36 * root 2			
		a. 20.8 inches tall				
		b. 25.5 inches tall				
		d 50 9 inches tall				
		3. Determine the exact values for the sides $\boldsymbol{x}$ and	a) Correct answer			
		У Л	b) misconception about the			
	2	in the given triangle.	30-60-90 rule			
		/30°\	c) contused with the 45-45-90			
			d) reversed sides and confused			
		24 / \	the 45-45-90 rule			
		a. $x = 12$ , $y = 12\sqrt{3}$				
		b. $x = 12\sqrt{3}$ , $y = 12$				
		c. $x = 12$ , $y = 12\sqrt{2}$				
		d. $x = 12\sqrt{2}$ , $y = 12$				
	2	4. The size of a TV assess is siver by the law oth of				
	2	its diagonal. The screen aspect ratio is the ratio of	b) incorrect ratio (3:4)			
		its width to its height. The screen aspect ratio of a	c) incorrectly squared sides of			
		standard TV screen is 4:3. What are the width	right triangle (forgot to square 3			
		and height of a 27" TV screen?	& 4) d) incorrect ratio and incorrectly			
			squared sides of right triangle			
			e quant a crast or right manight			
		with				
		Walut				
		a. width: 21.6 in., height: 16.2 in.				
		b. width: 16.2 in., height: 21.6 in.				
		c. width: 40.8 in., height: 30.6 in.				
		u. width: 30.6 in., neight: 40.8in.	2 nts			
	2	triangle with side length of 40 inches Will a	* finds the correct height of the			
		rectandular metal sheet of 32 x 40 inches he large	triangle (34.6 inches)			
		enough to cut out one sign? Explain your reasoning	and			
			Answers NO and explains that			
			longer than the 32" dimension			

	of the sheet metal.

## Geometry EOC Review Nov 26 - 30

Name:

G.4.A Determine the equation of a line in the coordinate plane that is described geometrically, including a line

through two given points, a line through a given point parallel to a given line, and a line through a given

point perpendicular to a given line.

Standard	Difficult	Question/Task	Answer/Work
	1	6. Find the equation for a line that passes through the points (4,-8) and is perpendicular to the line $y = 4x + 3$ a. $y = 4x + 24$ b. $y = -\frac{1}{4}x - 2$ c. $y = \frac{1}{4}x - 9$ d. $y = -\frac{1}{4}x - 7$	<ul> <li>A) The student found the line parallel to the given line through the given point.</li> <li>B) The student plugged in 4 for y and -8 for x instead of the 4 for x and -8 for y.</li> <li>C) The student used the positive reciprocal instead of the negative reciprocal.</li> <li>D) Correct</li> </ul>
G.4.B - Dete	rmine the	coordinates of a point that is described geometrically.	1
	1	The city of Belmont plans to build a circular fountain, which has a water spout in the center, in front of City Hall. The endpoints of a diameter of the fountain are at (17, 3) and (5,	The ordered pair of the position of the water spout = (11, 8.5) or equivalent
		14) on the planning grid. Determine the position of the ordered pair of the water spout.	If a student writes an answer of (6, 5.5) or (6, -5.5), the student is finding the distance between each coordinate, not the actual location of the coordinate.

G.6.A - Deriv	e and ap	ply formulas for arc length and area of a sector of a circ	cle.
Standard	Difficult v	Question/Task	Answer/Work
	1	12. The diagram below represents a sector of a circle. Which of the following is closest to the arc length of <i>AB</i> if the central angle is 75 and the radius of the circle is 5 inches?	<ul> <li>a. correct</li> <li>b. found the area of the sector</li> <li>c. didn't account for the diameter of the circle, only the radius</li> <li>d. didn't find the ratio of the amount of circle represented - used the 75 as a percent</li> </ul>
	formula	<ul> <li>a. 6.5 inches</li> <li>b. 16.4 inches</li> <li>c. 3.3 inches</li> <li>d. 23.6 inches</li> </ul>	ires to solve problems
G.O.C - Apply	/ IUIIIuia:	8 In Figure 1 a cylinder with a diameter of 12	a student incorrectly
	2	<ul> <li>8. In Figure 1 a cylinder with a diameter of 12 centimeters if filled with water to a height of 8 centimeters. In Figure 2 a rock is submerged in the cylinder.</li> <li>Which of the following is closest to the volume of the rock?</li> <li>Figure 1 Figure 2</li> <li>figure 2 figure 2</li> <li>figure 1 figure 2</li> <li>figure 2 figure 2</li> <li>figure 1 figure 2</li> <li>figure 2 figure 2</li> <li>figure 2 figure 2</li> <li>figure 3</li> <li>figure 3</li> <li>figure 4</li> <li>figure 4</li> <li>figure 5</li> <li>figure 5</li> <li>figure 6</li> <li>figure 6</li> <li>figure 7</li> <li>figure 7</li> <li>figure 7</li> <li>figure 8</li> <li>figure 9</li> <l< th=""><th><ul> <li>a. student incorrectly calculated the volume of a cylinder, but did find the difference in the displacement</li> <li>b. student incorrectly calculated the volume of the cylinder, and didn't account</li> <li>c. correct</li> <li>d. student found the volume of the water and the rock</li> </ul></th></l<></ul>	<ul> <li>a. student incorrectly calculated the volume of a cylinder, but did find the difference in the displacement</li> <li>b. student incorrectly calculated the volume of the cylinder, and didn't account</li> <li>c. correct</li> <li>d. student found the volume of the water and the rock</li> </ul>
	2	balls are sold in packages of five. The packaging is a rectangular prism, with the golf balls stacked on top of one another. Once the package is fully enclosed, how much space is un-used inside the package? (The diameter of	The student shows understanding of applying formulas for surface area and volume of three-dimensional figures
		a golf ball is 1.68 inches)	to solve problems by

volume, or surface area of two- and three-dimensional figures.27. Mason City has a circular sandbox in the park. Last month, they expanded the sandbox so it has a diameter that is twice as long as the old sandbox. The height did not change.a) student may just the linear change without taking into account the area change by the diameter b) student may assu that it is three times bi based on volume 3-dimensional c. 4 times more sand d. 8 times more sand d. 8 times more sanda) student may just that is time account the area on volume 3-dimensional c) correct d) student may assu that it is three times bi based on volume 3-dimensional c) correct d) student may assu that it is three times bi based on volume 3-dimensional c) correct d) student may assu that it is three times bi based on volume 3-dimensional c) correct d) student may assu that the "twice" as long applied by 2^3 ba on the volumeG.6.FSolve problems involving conversions within and between systems.Answer/Work21. The area of a room is 81 square feet. Determine the area of the room in square yards.a) correct answer b) they divide by 3 be they used the linear	g the following: Calculates the volume of the prism (packaging) Calculates the volume of all the golf balls Writes 11.3 cubic inches ( $\pm$ .2)	How much space is un-used inside the golf ball package (to the nearest tenth)?         Show your work using words, numbers, and/or diagrams.         D       Predict and verify the effect that changing one, two, or three linear d a,	G.6.D Predict and area,	G.6.D area,
27. Mason City has a circular sandbox in the park. Last month, they expanded the sandbox so it has a diameter that is twice as long as the old sandbox. The height did not change.a) student may just the linear change without taking into account the area change b) student may assu that it is three times bi based on volume 3-dimensional c) correct d) student may assu thata.2 times more sand b. 3 times more sand c. d. 8 times more sand d. 8 times more sanda) student may just the linear change without taking into account the area change b) student may assu that it is three times bi 		volume, or surface area of two- and three-dimensional figures.	volume, or	
G.6.F       Solve problems involving conversions within and between systems.         Standard       Difficult y       Question/Task       Answer/Work         1       The area of a room is 81 square feet.       a) correct answer         b) they divide by 3 be square yards.       b) they divide by 3 be they	udent may just apply inear change thout taking into count the area nge the diameter udent may assume s three times bigger ised on volume being mensional correct rudent may assume e "twice" as long is plied by 2^3 based e volume	<ul> <li>7. Mason City has a circular sandbox in the park. Last month, they expanded the sandbox so it has a diameter that is twice as long as the old sandbox. The height did not change.</li> <li>How much more sand can the new sandbox hold?</li> <li>a. 2 times more sand</li> <li>b. 3 times more sand</li> <li>c. 4 times more sand</li> <li>d. 8 times more sand</li> </ul>	2	
StandardDifficult yQuestion/TaskAnswer/Work21.The area of a room is 81 square feet. Determine the area of the room in square yards.a) correct answer b) they divide by 3 be they used the linear		F Solve problems involving conversions within and between systems.	G.6.F Solve prot	G.6.F
21. The area of a room is 81 square feet. Determine the area of the room in square yards.a) correct answer b) they divide by 3 be they used the linear	wer/Work	ndard Difficult Question/Task	Standard Difficu	Standa
a.9 square yardsconversionb.27 square yardsc) students might multiply byc.240 square yardsby lineard.720 square yardsconversion factord) student multiply bycorrect	orrect answer ey divide by 3 because sed the linear ersion udents might multiply hear onversion factor udent multiply by ect	1.       The area of a room is 81 square feet.         2       Determine the area of the room in square yards.         a.       9 square yards         b.       27 square yards         c.       240 square yards         d.       720 square yards	2	

Geometry	EOC R	leview	Dec 3 - 7	Name:	
G.1.C - Use	deductive	e reasoning t	o prove that a valic	geometric statement is	s true.
Standard	Difficult y	Question/	Task	5	Answer/Work
	2	9. □ <i>LPT</i> is the c followir a. <i>m</i> □ <u>1</u> b. <i>m</i> □ <u>1</u> c. <i>m</i> □ <u>1</u> d. <i>m</i> □ <u>1</u>	is an obtuse sca btuse angle in ng is not a valid c $+ m \Box T \Box m \Box P$ $+ m \Box T \Box 90^{\circ}$ $+ m \Box P + m \Box T [$	Ilene triangle. If □P <i>LPT</i> , which of the onclusion? 180°	<ul> <li>a. student may think that an obtuse angle is <sup>3</sup> 90° which could make this statement true and/or the student didn't realize that it was an <i>obtuse</i> scalene triangle.</li> <li>b. correct</li> <li>c. student may think that an obtuse angle is <sup>3</sup> 90°</li> <li>d. student may not understand the context of the problem and found a valid conclusion</li> </ul>
G 2 A Know	nrove a	nd apply the	orems about parall	el and perpendicular lin	
G.2.A Know	2 2	Is Mary Is Mary Is Mary Is Mary If N corr diag If N info	prems about paralle ws that line <i>m</i> is line <i>m</i> is    to line <i>q</i> <i>q</i> <i>q</i> <i>q</i> <i>q</i> <i>q</i> <i>q</i> <i>q</i> <i>q</i> <i>q</i>	el and perpendicular lin $\perp$ to line <i>q</i> . Mary <i>n</i> . <i>n</i> <i>m</i> ow why she is numbers, and/or what additional ry need in order to   to line <i>n</i> ?	<ul> <li>The student shows understanding of <i>theorems</i> <i>about parallel and</i> <i>perpendicular lines</i> by doing the following: <ul> <li>Writes that Mary is incorrect</li> <li>Shows that line <i>n</i> is also ⊥ to line <i>q</i></li> </ul> </li> </ul>

G.2.B Know intersected b a trar	v, prove, a y nsversal.	and apply theorems about angles, including angles tha	t arise from parallel lines
Standard	y y	Question/lask	Answer/Work
	1	In the figure below, the value of $y =$	y=105

G.3.A - Know, explain, and apply basic postulates and theorems about triangles and the special lines, line segments,

Standard	Difficult	Question/Task	Answer/Work
	2	<ul> <li>5. Triangle ABC is similar to triangle DEC. Which statement is true:</li> <li>A</li> <li>B</li> <li>AB    DE</li> <li>BE ⊥ DA</li> <li>C. 4A ≅ 4E</li> <li>d. 4C = 90°</li> </ul>	<ul> <li>a. correct</li> <li>b. student is making an assumption based on the diagram that cannot be proven with the information given</li> <li>c. student didn't correctly 'align' the similar triangles, therefore the congruency statement is false</li> <li>d. student is making an assumption based on the diagram that cannot be proven with the information given</li> </ul>
G3C-Use	the pror	erties of special right triangles (30 - 60 - 90 and 45	- 45 - 90 ) to solve problems
	1	<ul> <li>A rhombus is shown below. Which of these is closest to the height, h, of the rhombus?</li> <li>a. 0.5 b. 0.9 c. 1.0 d. 1.7</li> </ul>	<ul> <li>a) found the side opposite the 30° angle</li> <li>b) correct</li> <li>c) found the hypotenuse - may have a misconception about properties of altitudes of rhombuses.</li> <li>d) didn't understand the relationship of the √3 in the 30-60-90 relationship</li> </ul>

G.3.D - Know, prove, and apply the Pythagorean Theorem and its converse.			
1	10. Triangle <i>XYZ</i> is shown below.	a. Assume that the missing	
	What is the length of XY?	side has be shorter than	
	a. 9 cm b. $\sqrt{65}$ cm c. $\sqrt{75}$ cm d. $\sqrt{116}$ cm	<ul> <li>10 cm, but longer than 5 cm, not seeing the connection to using the Pythagorean Theorem</li> <li>b. correct</li> <li>c. Assumed that Y was a 90° angle</li> <li>d. Didn't account that 10 cm was the length XZ and to get the answer you need to subtract out the piece from the height of the triangle to Z.</li> </ul>	
	In a right triangle, one leg measures 24cm and	Hypotenuse = 26cm.	
1	the other leg measures 10cm. What is the		
	length of the hypotenuse?		

## Geometry EOC Review Dec 17 - 21 Name:

G.3.C Use the properties of special right triangles (30°–60°–90° and 45°–45°–90°) to solve problems.			
G.3.D Know, prove, and apply the Pythagorean Theorem and its converse.			
G.3.E Solve problems involving the basic trigonometric ratios of sine, cosine, and tangent.			
Standard	Difficult	y strategies to solve problems.	Answer/Work
	У	2 Viold sign has a shape of an equilatoral	a) divided 26 by root 2
	2	triangle with side length of 36 inches	a) divided 36 by 1001 3 b) 18 * root 2
	-		c) correct answer
		What is the height of the sign?	d) 36 * root 2
		a. 20.8 inches tall	
		b. 25.5 inches tall	
		C. 31.2 Inches tall	
		3. Determine the exact values for the sides <b>x</b> and	a) Correct answer
		y in the given triangle.	b) misconception about the
	2		30-60-90 rule
		/30 <sup>-</sup> \	c) confused with the 45-45-90
			rule d) reversed sides and confused
		a. $x = 12$ , $y = 12\sqrt{3}$ <b>24</b> / <b>Y</b>	the 45-45-90 rule
		b. $x = 12\sqrt{3}$ $y = 12\sqrt{3}$	
		$(12, \sqrt{3}, \sqrt{3}, \sqrt{3})$	
		$d_{1} = 12, 7 = 12$	
		$x = 12\sqrt{2}, y = 12$	
	2	4. The size of a TV screen is given by the length of	a) correct answer
		its diagonal. The screen aspect ratio is the ratio of	b) incorrect ratio (3:4)
		Its width to its height. The screen aspect ratio of a standard TV screen is 4:3 What are the width	c) Incorrectly squared sides of right triangle (forgot to square 3
		and height of a 27" TV screen?	& 4)
			d) incorrect ratio and incorrectly
			squared sides of right triangle
		++ 2778	
		ри ри	
		width	
		a. width: 21.6 in., height: 16.2 in.	
		b. Width: 16.2 in., height: 21.6 in.	
		d. width: 30.6 in., height: 40.8in.	
		The Yield sign has a shape of an equilateral	2 pts
	2	triangle with side length of 40 inches. Will a	* finds the correct height of the
		rectanglular metal sheet of 32 x 40 inches be large	triangle (34.6 inches)
		enough to cut out one sign? Explain your reasoning.	Answers NO and explains that
			the height of the triangle (34") is
			longer than the 32" dimension
			of the sheet metal.

## Geometry EOC Review Nov 26 - 30

Name:

G.4.A Determine the equation of a line in the coordinate plane that is described geometrically, including a line

through two given points, a line through a given point parallel to a given line, and a line through a given

point perpendicular to a given line.

Standard	Difficult	Question/Task	Answer/Work
	1	6. Find the equation for a line that passes through the points (4,-8) and is perpendicular to the line $y = 4x + 3$ a. $y = 4x + 24$ b. $y = -\frac{1}{4}x - 2$ c. $y = \frac{1}{4}x - 9$ d. $y = -\frac{1}{4}x - 7$	<ul> <li>A) The student found the line parallel to the given line through the given point.</li> <li>B) The student plugged in 4 for y and -8 for x instead of the 4 for x and -8 for y.</li> <li>C) The student used the positive reciprocal instead of the negative reciprocal.</li> <li>D) Correct</li> </ul>
G.4.B - Dete	ermine the	coordinates of a point that is described geometrically.	•
	1	The city of Belmont plans to build a circular fountain, which has a water spout in the center, in front of City Hall. The endpoints of a diameter of the fountain are at (17, 3) and (5,	The ordered pair of the position of the water spout = (11, 8.5) or equivalent
		14) on the planning grid. Determine the position of the ordered pair of the water spout.	If a student writes an answer of (6, 5.5) or (6, -5.5), the student is finding the distance between each coordinate, not the actual location of the coordinate.

G.6.A - Derive and apply formulas for arc length and area of a sector of a circle.			
Standard	Difficult v	Question/Task	Answer/Work
	1	12. The diagram below represents a sector of a circle. Which of the following is closest to the arc length of <i>AB</i> if the central angle is 75 and the radius of the circle is 5 inches?	<ul> <li>a. correct</li> <li>b. found the area of the sector</li> <li>c. didn't account for the diameter of the circle, only the radius</li> <li>d. didn't find the ratio of the amount of circle represented - used the 75 as a percent</li> </ul>
	formula	<ul> <li>a. 6.5 inches</li> <li>b. 16.4 inches</li> <li>c. 3.3 inches</li> <li>d. 23.6 inches</li> </ul>	ires to solve problems
G.O.C - Apply	Torriula	8 In Figure 1 a cylinder with a diameter of 12	a student incorrectly
	2	<ul> <li>8. In Figure 1 a cylinder with a diameter of 12 centimeters if filled with water to a height of 8 centimeters. In Figure 2 a rock is submerged in the cylinder.</li> <li>Which of the following is closest to the volume of the rock?</li> <li>Figure 1 Figure 2</li> <li>figure 2 figure 2</li> <li>figure 1 figure 2</li> <li>figure 1 figure 2</li> <li>figure 2 figure 2</li> <li>figure 2 figure 2</li> <li>figure 3</li> <li>figure 4 cm<sup>3</sup></li> <li>figure 3</li> <li>figure 4</li> <li>figure 4</li> <li>figure 5</li> <li>figure 5</li> <li>figure 6</li> <li>figure 6</li> <li>figure 7</li> <li>figure 7</li> <li>figure 7</li> <li>figure 8</li> <li>figure 9</li> <li>figure 9<!--</td--><td><ul> <li>a. Student incorrectly calculated the volume of a cylinder, but did find the difference in the displacement</li> <li>b. student incorrectly calculated the volume of the cylinder, and didn't account</li> <li>c. correct</li> <li>d. student found the volume of the water and the rock</li> </ul></td></li></ul>	<ul> <li>a. Student incorrectly calculated the volume of a cylinder, but did find the difference in the displacement</li> <li>b. student incorrectly calculated the volume of the cylinder, and didn't account</li> <li>c. correct</li> <li>d. student found the volume of the water and the rock</li> </ul>
		balls are sold in packages of five. The	The student shows
	2	packaging is a rectangular prism, with the golf balls stacked on top of one another. Once the package is fully enclosed, how much space is un-used inside the package? (The diameter of a golf ball is 1.68 inches)	understanding of applying formulas for surface area and volume of three-dimensional figures to solve problems by

			How much space is un-used inside the golf ball package (to the nearest tenth)? Show your work using words, numbers, and/or diagrams.	<ul> <li>doing the following:</li> <li>Calculates the volume of the prism (packaging)</li> <li>Calculates the volume of all the golf balls</li> <li>Writes 11.3 cubic inches (±.2)</li> </ul>
G.6.D area,	.6.D Predict and verify the effect that changing one, two, or three linear dimensions has on perimeter, rea			
,	volun	ne, or sui	face area of two- and three-dimensional figures.	
		2	<ul> <li>7. Mason City has a circular sandbox in the park. Last month, they expanded the sandbox so it has a diameter that is twice as long as the old sandbox. The height did not change.</li> <li>How much more sand can the new sandbox hold?</li> <li>a. 2 times more sand</li> <li>b. 3 times more sand</li> <li>c. 4 times more sand</li> <li>d. 8 times more sand</li> </ul>	<ul> <li>a) student may just apply the linear change without taking into account the area change by the diameter</li> <li>b) student may assume that it is three times bigger based on volume being</li> <li>3-dimensional</li> <li>correct</li> <li>d) student may assume that the "twice" as long is applied by 2^3 based on the volume</li> </ul>
G.6.F	Solv	e probler	ns involving conversions within and between systems.	AnowerMerk
Standa	ar U	y		AIISWEI/WOFK
		2	<ol> <li>The area of a room is 81 square feet. Determine the area of the room in square yards.</li> <li>a. 9 square yards</li> <li>b. 27 square yards</li> <li>c. 240 square yards</li> <li>d. 720 square yards</li> </ol>	<ul> <li>a) correct answer</li> <li>b) they divide by 3 because</li> <li>they <ul> <li>used the linear</li> <li>conversion</li> <li>c) students might multiply</li> <li>by linear <ul> <li>conversion factor</li> </ul> </li> <li>d) student multiply by</li> <li>correct <ul> <li>conversion factor</li> </ul> </li> </ul></li></ul>