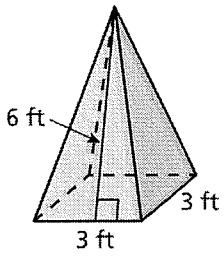
Name: _____ Date:_____

Ms. Napolitano Activity 4.5

Homework

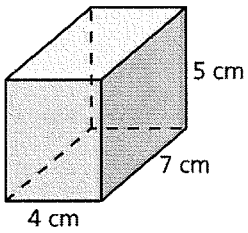
Find the surface area of the pyramid. The side lengths of the base are equal.

1.

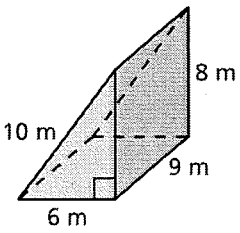


Find the surface area of the prism.

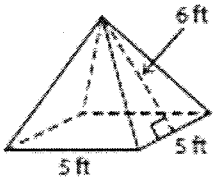
3.

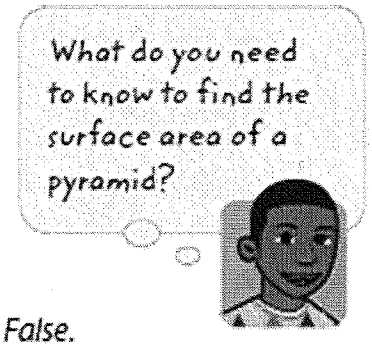


4.



5. Look at the pyramid below.





Tell whether each statement about the pyramid is *True* or *False*.

a. The area of each triangular face is 30 square feet. ☐ True ☐ False

b. The surface area of the pyramid is 85 square feet. ☐ True ☐ False

c. A net of the pyramid would have three triangular faces. ☐ True ☐ False

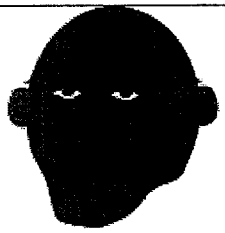
d. The area of the base is 25 square feet. ☐ True ☐ False

FAST FOOD CALORIE COUNT

Stamped on the back of any label in your kitchen is a list of Nutrition Facts. On this label it shares the details of what is actually in the food being eaten. At the top of the list... *calories*. Calories are in practically everything we eat. Most simply, calories are energy that fuels our bodies. Simply put, if you eat more calories than you use – you have extra (gain weight). If you eat less calories than you use – you burn calories stored in fat cells (lose weight). Of course, not eating enough calories is another issue altogether which will lead to other health problems. The point? Eat smart.

Typically fast food is the brunt of the public scrutiny. Many eat it for convenience, but it lacks the nutritional value of a good home cooked meal. **Using the menus on the handout "Fast Food Nation"** help five people write inequalities to determine if their lunch is within their daily calorie limit to maintain their weight and graph the solution.

Name _____ Date _____ Period _____



Tony

H: 5'9" W: 210

Age: 29 **Moderate Activity**

Lunch Calorie Limit:
821

TACO BELL

Nachos	QTY. 1
Double Decker Tacos	QTY. x
Diet Coke	QTY. 1

Inequality

< 821

How many Double Decker Tacos can Tony eat to stay under his limit?

Jessica

H: 5'3" W: 125

Age: 23 **Very Active**

Lunch Calorie Limit:
713

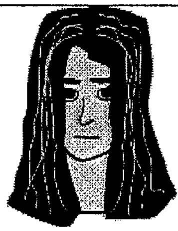
KFC

Snacker Ultimate Cheese	QTY. 1
Potato Wedges	QTY. 1
Raspberry Iced Tea	QTY. x

Inequality

< 713

Jessica would like to get a Raspberry Iced Tea if she would stay under her limit? Would she?



Isabella

H: 5'9" W: 145

Age: 31 **Little Activity**

Lunch Calorie Limit:
628

McDONALD'S

Big Mac	QTY. 1
Large Fry	QTY. 1
Chocolate Triple Thick Shake	QTY. 1

Inequality

< 628

Isabella forgot about her Calorie Limit. Did she stay under her limit? How much did she go over?

Tommy

H: 6'4" W: 215

Age: 35 **Extremely Active**

Lunch Calorie Limit:
1313

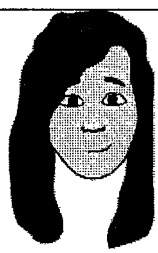
PIZZA HUT

Supreme Personal Pan Pizza	QTY. 1
Cheese Garlic Bread	QTY. x
Mountain Dew	QTY. 1

Inequality

< 1313

On lunch break with the guys, Tommy is debating how many orders of Cheese Garlic Bread he can have without going over?



Eden

H: 5'6" W: 135

Age: 17 **Moderate Activity**

Lunch Calorie Limit:
689

SUBWAY

6 in. Veggie Delite Sub	QTY. 2
Water	QTY. 1
SOUP?	QTY. 1

Inequality

< 689

Eden is trying to choose between the Chicken Tortilla or the Creamy Potato and Bacon Soup. She likes the Creamy Potato better, but would she go over? Which should she pick?

EXTENSION: The recommended calorie intake varies from person to person, but is typically between 1800 to 2400 calories a day. If this was spread across 3 equal meals, it's roughly between 600 to 800 calories per meal. Based on this activity and the **Fast Food Chart**, how well does fast food fits into this diet? Explain.

Name Callach Date

6.1 Practice A

Describe the pattern in the mapping diagram. Copy and complete the diagram.

1.

Input	Output
1	3
2	6
3	9
4	
5	
6	

2.

Input	Output
1	−2
2	0
3	2
4	
5	
6	

List the ordered pairs shown in the mapping diagram.

3.

Input	Output
0	1
2	2
4	3
6	4

4.

Input	Output
1	9
4	4
7	−1
10	−6

Draw a mapping diagram of the set of ordered pairs.

5. (1, 2), (3, 5), (6, 9), (10, 12)

6. (−2, 7), (0, 5), (5, 8), (4, 9)

7. The table shows the number of tickets purchased and the total cost.

Tickets	Total Cost
1	$14
2	$24
3	$30
4	$32

a. Use the table to draw a mapping diagram.

b. Is the relation a function? Explain.

c. Describe the pattern. How does the cost per ticket change as you buy more tickets?

d. Based on this pattern, how much would you expect to pay for 5 tickets?

e. Compare the costs for 3 tickets and 5 tickets. What can you suggest?

f. Explain why this pattern could not continue for up to 8 tickets.

Worksheet Level 2: Writing Linear Equations

Goals:

I have mastered level 2 when I can:

Write an equation given the slope and y-intercept

Write an equation from a table

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

1) Slope $= \frac{9}{4}$, y-intercept $= -4$

2) Slope $= -\frac{7}{4}$, y-intercept $= 5$

3) Slope $= 2$, y-intercept $= 4$

4) Slope $= -\frac{1}{2}$, y-intercept $= -2$

Write an equation in slope-intercept form for each table below. Show how you found the slope and y-intercept.

i.

x	y
0	0
1	2.5
2	5
3	7.5
4	10

ii.

x	y
0	6
1	7
2	8
3	9
4	10

iii.

x	y
0	−1.5
1	1.5
2	4.5
3	7.5
4	10.5

iv.

x	y
0	3
1	−1
2	−5
3	−9
4	−13

v.

x	y
1	1
2	5
3	9
4	13
5	17

Write a linear equation for each table relating x and y.

a.

x	0	3	6	10
y	2	8	14	22

b.

x	0	3	6	10
y	20	8	−4	−20

c.

x	2	4	6	8
y	5	8	11	14

d.

x	0	3	6	9
y	20	11	2	−7

Determine if the table represents a linear relationship, if yes, write an equation in slope-intercept form.

a.

x	2	4	6	8	10	12	14
y	0	1	2	3	4	5	6

b.

x	1	2	3	4	5	6	7
y	0	3	8	15	24	35	48

c.

x	1	4	6	7	10	12	16
y	2	−1	−3	−4	−7	−9	−13

Practice:

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

1) Slope $= \frac{5}{2}$, y-intercept $= 0$

2) Slope $= 1$, y-intercept $= 1$

3) Slope $= -\frac{7}{2}$, y-intercept $= 3$

4) Slope $= -1$, y-intercept $= -2$

Find the slope and y-intercept for each table, and then write an equation.

x	0	1	2	3	4
y	0	2	4	6	8

x	0	1	2	3	4
y	3.5	4.5	5.5	6.5	7.5

x	1	2	3	4	5
y	1	3	5	7	9

x	0	1	2	3	4
y	5	3	1	-1	-3

x	2	3	4	5	6
y	-11	-14	-17	-20	-23

x	-3	-2	-1	0
y	7	5	3	1