

**Pre Calc** 6-2 Word Problem Practice WS + 384: 49-61

1. What is each student's final grade?

Student	Tests	Projects	Homework	Quizzes
Alexandra	92	100	89	80
Megan	72	85	80	75
Brittney	88	78	85	92

Type	Weight
Tests	40% (.4)
Projects	15% (.15)
Homework	25% (.25)
Quizzes	20% (.2)

2. What is the Nutrition information for each blend?

	Almonds	Cashews	Pecans
Protein (g/cup)	26.2	21	10.1
Carbs (g/cup)	40.2	44.8	14.3
Fat (g/cup)	71.9	63.5	82.8

	Protein Blend	Low Fat Mix	Low Carb Mix
Almond (cups)	6	3	3
Cashews (cups)	3	6	1
Pecans (cups)	1	1	6

3. If a serving is 1 cup rather than 10 cups, what is the nutrition per serving?

4. The first table below show the points awarded by judges at a state fair for a crafts contest for Brielle, Brynn, and Briana. The second table shows the multiplier used for the degree of difficulty for each of the pieces the girls created. **Find the total score for each of the girls in this contest.**

	Quilting	Butter Carving	Knitting
Brielle	16.4	19	17.5
Brynn	12.4	13	16
Briana	15	20	17.5

	Brielle	Brynn	Briana
Quilting	2	3	1
Butter Carving	1	2	3
Knitting	2	1	2

5. **INVENTORY** A hardware company keeps three types of lawnmowers in stock at each of its three stores. The current inventory and retail price for each mower is shown. Determine which store's inventory has the greatest value. What is this value?

Mower Type	Store		
	A	B	C
4 HP	5	4	3
4.5 HP	3	5	4
5 HP	7	2	3

Mower Type	4 HP	4.5 HP	5 HP
Retail Value (\$)	250	300	350

6. **ICE SKATING** Holly, Joelle, and Luisa are competitive skaters. Their routines are judged on skating skill (SS), choreography (C), and interpretation (I). In a recent competition, they received the following scores.

Skater	SS	C	I
Holly	6	4	2
Joelle	3	5	1
Luisa	2	4	6

One of two weighted systems shown below is used.

Criteria	System A	System B
SS	20%	40%
C	50%	30%
I	30%	30%

Use matrices to determine which system favors each skater.

- a. Holly
- b. Joelle
- c. Luisa

7. Two dump trucks have capacities of 10 tons and 12 tons. They make a total of 20 round trips to haul 226 tons of topsoil for a landscaping project. How many round trips does each truck make?