

4. Jackie is making a snack mix for a party. She is using cashews and peanuts. The table below shows the relationship of the number of packages of cashews she needs to the number of cans of peanuts she needs to make the mix.

| Packages of Cashews | Cans of Peanuts |
|---------------------|-----------------|
| 0 | 0 |
| 1 | 2 |
| 2 | 4 |
| 3 | 6 |
| 4 | 8 |

- What points must be on the graph for the number of cans of peanuts to be proportional to the number of packages of cashews? Explain why.
 - Write an equation to represent this relationship.
 - Describe the ordered pair (12, 24) in the context of the problem.
5. The following table shows the amount of candy and price paid.

| | | | | |
|-------------------------------|---|-----|------|----|
| X Amount of Candy (in pounds) | 2 | 3 | 5 | 12 |
| Y Cost (in dollars) | 5 | 7.5 | 12.5 | 30 |

y/x = cost per pound (5/2 = 2.5, 7.5/3 = 2.5, 12.5/5 = 2.5)

- Is the cost of the candy proportional to the amount of candy? *yes - here exists a constant 2.5 that relates candy to cost*
- Write an equation to illustrate the relationship between the amount of candy and the cost. *y = 2.5x*
- Using the equation, predict how much it will cost for 12 pounds of candy. *30*
- What is the maximum amount of candy you can buy with \$60? *x = 60 / 2.5 = 24 lbs*
- Graph the relationship.

