

Hats Off



The school's baseball team is selling hats for a fundraiser. They have called two companies, who have each given the team a quote. Flip 'ur Lid charges a \$24 design fee and \$2 per hat. Head Covers charges a \$10 design fee and \$4 per hat.

1) Write an equation for each of the two companies by filling in a table and looking for a pattern.

Flip 'ur Lid

# of hats purchased	cost per hat _____ x _____	design fee	= total
0 hats			
1 hat			
2 hats			
3 hats			

- Which value remained the same? _____ Why? _____
- Which value varied? _____ Why? _____
- Equation: total (y) = $\frac{\text{_____}}{\text{changing}}x + \frac{\text{_____}}{\text{constant}}$

Head Covers

# of hats purchased	cost per hat _____ x _____	design fee	= total
0 hats			
1 hat			
2 hats			
3 hats			

- Which value remained the same? _____ Why? _____
- Which value varied? _____ Why? _____
- Equation: total (y) = $\frac{\text{_____}}{\text{changing}}x + \frac{\text{_____}}{\text{constant}}$

2) a) Write your two equations from number 1 and graph them.

Flip 'ur Lid: _____ Head Covers: _____

b) Fill in the sentence frame below regarding the following questions:

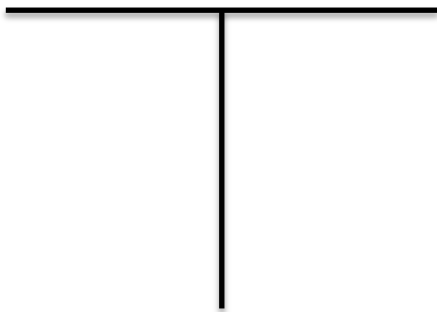
- Why are the increments on the x -axis marked in even increments of 1 and y -axis marked in even increments of 2? We could have graphed both axes by using 1, 2, 3, 4.

The y -axis should be marked 2, 4, 6, ... because _____.

c) The solution to the problem is:

(,).

d) Verify your solution by using substitution (for both equations).



e) For how many hats will the cost be the same? _____

What is that cost? _____

f) If the team was only buying 20 hats, which company should they choose? Why?

The team should buy hats from _____ because _____.

g) Explain when it is cheaper for the baseball team to use Flip 'ur Lid. It is cheaper to buy hats from Flip 'ur Lid when the team is purchasing: _____.

