

Around the Campfire

Number of People	Cost at Forest Hills	Cost at Red Oaks	Cost at Tepee Park
0	120	0	30
1	120	20	45
2	120	40	60
3	120	60	75
4	120	80	90
5	120	100	105
6	120	120	120
7	120	140	135
8	120	160	150
n	120	20n	15n+30

Conclusion:

For 5 people or less, Red Oaks is cheaper

For 6 people they are all the same price

For 7 or more people Forest Hills is cheaper

An Original Website

X: number of users in the first month

$2x + 1000$: number of users at the end of the second month

At the end of the third month:

$$2(2x + 1000) = x + 92\,000$$

$$4x + 2\,000 = x + 92\,000$$

$$3x = 90\,000$$

$$x = 30\,000$$

End of Second month: 61 000 users

End of Third month: 122 000 users

Number of users to cover cost = $\$75\,000 / \$0.80/\text{user}$

$$= 93\,750 \text{ users}$$

As of the third month they can reimburse the cost.

Chefs in the Making

Christine's Recipe

1 cup butter = 250 mL

2/5 cup sugar = 100 mL

4/5 cup milk = 200 mL

2 cups flour = 500 mL

2 tsp baking powder = 10 mL

4 cups sugar = 1250 mL

½ cup butter = 125 mL

2 tbs coffee = 30 mL

4 tbs water = 60 mL

1 tsp cocoa powder = 5 mL

The recipes are not equivalent. Every ingredient in Shaun's recipe is 1 ½ times Christine's except the butter which is 3 times as much and the cocoa powder which is also 3 times as much.

Air Ballet

$$\text{Arc length} = \frac{(360^\circ - 23^\circ)}{360^\circ} * 2\pi(6)$$

$$= 35.29 \text{ m}$$

$$\text{Total length} = 35.29 + 2(6)$$

$$= \mathbf{47.29 \text{ m}}$$