

Rating Rate Plans

From Rate Plans to Restaurants - Handout



Kasa Indian Eatery	Food Truck Prices	Restaurant Prices
Entrees • Chicken Tikka • Lamb Curry • Gobi Aloo (Vegetarian)	\$8.00	\$15.00
Sides • Pappadum • Daal • Samosa	\$5.00	\$9.00
Beverages • Chai • Lassi • Soda	\$2.00	\$3.00

Instructions

Trey's family loves eating at Kasa. Sometimes they eat at the restaurant and sometimes they go to Kasa's food truck and eat in a park. Either way, they use algebraic expressions to know what they will have to pay.

Variables:

e = number of entrees ordered
 s = number of sides ordered
 b = number of beverages ordered

1. $8e + 5s + 2b$

Is this expression for the

- food truck or the
 restaurant?

How do you know?

$15e + 9s + 3b$

Is this expression for the

- food truck or the
 restaurant?

How do you know?

The prices are shown as coefficients in the expressions.

2. Use the expressions to find out how much Trey's family would pay if they ordered the meal marked on the menu above at the food truck. Then do the same for the restaurant.

Food truck

$8(5) + 5(6) + 2(6)$

$40 + 30 + 12$

82

\$82.00 (plus tax and tip?)

Restaurant

$15(5) + 9(6) + 3(6)$

$75 + 54 + 18$

147

\$147.00 (plus tax and tip?)

3. Finally, change all the prices at Kasa. Write new expressions that could be used for your new prices.

Encourage the use of an expression that can be used regardless of the number of items ordered. (prices as coefficients and numbers of the entrees, sides, and beverages each as variables)