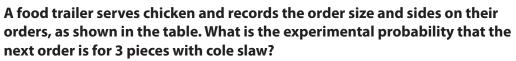
Calculating Experimental Probability of Compound Events

The experimental probability of a compound event can be found using recorded data.

EXAMPLE 1







	Green Salad	Macaroni & Cheese	French Fries	Cole Slaw
2 pieces	33	22	52	35
3 pieces	13	55	65	55

STEP 1

Find the total number of trials, or orders.

$$33 + 22 + 52 + 35 + 13 + 55 + 65 + 55 = 330$$

STEP 2

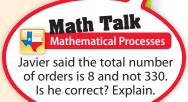
Find the number of orders that are for 3 pieces with cole slaw: 55.

STEP 3

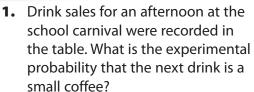
Find the experimental probability.

$$P(3 \text{ piece} + \text{slaw}) = \frac{\text{number of 3 piece} + \text{slaw}}{\text{total number of orders}}$$
$$= \frac{55}{330} \qquad \text{Substitute the values.}$$
$$= \frac{1}{6} \qquad \text{Simplify.}$$

The experimental probability that the next order is for 3 pieces of chicken with cole slaw is $\frac{1}{6}$.



YOUR TURN



	Soda	Water	Coffee
Small	77	98	60
Large	68	45	52

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