The Constant of Proportionality

Constant - A quantity that has a fixed value (number) that does not change

Constant of Proportionality - A constant value of the ratio of two proportional quantities

A group has \$200 to spend on a pizza party but doesn't know how many pizzas they can buy. The pizza parlor supplies them with this chart but it does not go high enough.



# of	Total	
		<u>32</u>
4	\$32	4
		<u>72</u>
9	\$72	9
		<u>96</u>
12	\$96	12



The group finds the constant:

The Constant is always \$8

$$$32 \div 4 = $8$$

$$$72 \div 9 = $8$$

$$$96 \div 12 = $8$$

Each pizza costs \$8. They could buy 25 pizzas for \$200.

Even though the amount of pizzas and total cost changed, the price per pizza price stayed <u>constant</u>.

Meets: Common Core Standard Seventh Grade 7.RP.A.2b