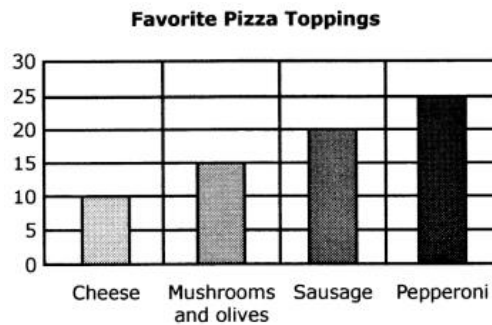


Possible Solutions

Jimmy asked his friends in his lunch period what their favorite pizza toppings were. The graph shows these results.



What is the approximate difference in the percentage of people that liked pepperoni on their pizza and the percentage of people that only liked cheese pizza?

Possible Solution 1

Given the bar graph above, a student will need to first find the total number of students surveyed which is $10+15+20+25 = 70$.

% of Pepperoni

$$\frac{25}{70}$$

25 students chose pepperoni out of a total of 70

$$(25 \div 70) \times 100$$

Change ratio to percentage, rounded to tenths place

$$35.7\%$$

% of Cheese

$$\frac{10}{70}$$

10 students chose cheese out of a total of 70

$$(10 \div 70) \times 100$$

Change ratio to percentage, rounded to tenths place

$$14.3\%$$

Find the difference in the percentage, rounded to the nearest whole percent

$$35.7\% - 14.3\% = 21.4\% = 21\%$$

Possible Solution 2

Given the bar graph above, you need to find the total number of students surveyed which is $10+15+20+25 = 70$.

% of Pepperoni

$$\frac{25}{70}$$

25 students chose pepperoni out of a total of 70

$$\frac{25}{70} = \frac{\%}{100}$$

Change ratio to percentage (rounded to tenths place)

$$25 \times 100 = 70 \times \%$$

Use cross-products to solve

$$2500 = 70 \times \%$$

$$\frac{2500}{70} = \frac{70 \times \%}{70}$$

Solve for the variable (rounded to the tenths place)

$$\% = 35.7\%$$

% of Cheese

$$\frac{10}{70}$$

10 students chose pepperoni out of a total of 70

$$\frac{10}{70} = \frac{\%}{100}$$

Change ratio to percentage (rounded to tenths place)

$$10 \times 100 = 70 \times \%$$

Use cross-products to solve

$$2000 = 70 \times \%$$

$$\frac{2000}{70} = \frac{70 \times \%}{70}$$

Solve for the variable (rounded to the tenths place)

$$\% = 14.3\%$$

Find the difference in the percentage, rounded to the nearest whole percent

$$35.7\% - 14.3\% = 21.4\% = 21\%$$