

The following price reductions are available.

① Two for the price of one

50%

② Buy one and get 25% off the second

87.5%

③ Buy two and get 50% off the second one

75%

④ Three for the price of two

66.66%

1. Which of these four different offers gives the biggest price reduction?

Two for the price of one

Explain your reasoning clearly

Assuming the price of one is \$1: ① $\frac{1}{2}$, paid 50% of the original price. ② $\frac{1.75}{2}$, paid 87.5% of the original price. ③ $\frac{1.50}{2}$, paid 75% of the original price. ④ $\frac{2}{3}$, paid 66.66% of the original price. Therefore, ① gives the biggest price reduction.

2. Which of these four different offers gives the smallest price reduction?

Buy one and get 25% off the second

Explain your reasoning clearly.

① 50% discount. ② 12.5% discount

③ 25% discount ④ 33.33% discount

Therefore, ② offers the smallest price reduction

The following price reductions are available.

Two for the price of one

Buy one and get 25% off the second

Buy two and get 50% off the second one

Three for the price of two

1. Which of these four different offers gives the biggest price reduction?

two for the price of one

Explain your reasoning clearly

For 50% and 25% off, you still have to pay for the second one, however, 2 for price of 1 means that you get the second one for free. Based on the ratio of 2 for price of 1, it would be 4 for price of 2, therefore 3 for price of 2 has a smaller price reduction.

2. Which of these four different offers gives the smallest price reduction?

Buy one and get 25% off the second

Explain your reasoning clearly.

You still have to pay 75% for the second one. If 25% off for 2 and 50% off and 3 for 2 you only need to pay 50% for the second/third one.

The following price reductions are available.

Two for the price of one

$\rightarrow \frac{1}{2}x$

Buy one and get 25% off the second

$\rightarrow \frac{7}{8}x$

Buy two and get 50% off the second one

$\rightarrow \frac{3}{4}$

Three for the price of two

$\rightarrow \frac{2}{3}x$

1. Which of these four different offers gives the biggest price reduction?

Two for the price of one gives the biggest reduction.

Explain your reasoning clearly

Let's say that the original price of one is x . In two for one, you are paying x for two, making the unit price $\frac{1}{2}x$. As shown above, I found the unit price for each sale. From my experience w/ fractions, I know $\frac{1}{2}x$ is the smallest unit price listed.

2. Which of these four different offers gives the smallest price reduction?

Buy one and get 25% off the second.

Explain your reasoning clearly.

As shown above, this is the highest unit price.

The following price reductions are available.

Two for the price of one

Buy one and get 25% off the second

Buy two and get 50% off the second one

Three for the price of two

1. Which of these four different offers gives the biggest price reduction?

Two for the price of one.

Explain your reasoning clearly

My reasoning for this is best expressed through equations, where y = total cost for x amount of

products, let's say each product costs \$5.

Two for the price of one =	Buy one get 25% off and =	Buy two get 50% off and =	3 for 2 =
$y = (5x) - (5 \cdot \frac{x}{2})$	$y = (5x) - (\frac{5x \cdot .75}{2})$	$y = (5x) - (\frac{5x \cdot .5}{2})$	$y = 5x \cdot \frac{2}{3}$
for x , assume you're buying 6 products			
$y = (5 \cdot 6) - (5 \cdot \frac{6}{2})$	$y = (5 \cdot 6) - (\frac{(5 \cdot 6) \cdot .75}{2})$	$y = (5 \cdot 6) - (\frac{(5 \cdot 6) \cdot .5}{2})$	$y = (5 \cdot 6) \cdot \frac{2}{3}$
$y = 30 - 15 =$ $y = 15$	$y = 30 - 3.75 =$ $y = 26.25$	$y = 30 - 7.5 =$ $y = 22.5$	$y = 30 \cdot \frac{2}{3} =$ $y = 20$

2. Which of these four different offers gives the smallest price reduction?

According to the above equations, buy one get 25% off and is the least significant price reduction.

Explain your reasoning clearly.

y equals the total of buying 6 products with each sale, and according to the equations, the buy 1 get the 2nd 25% off provides the smallest price decrease.

The following price reductions are available.

Two for the price of one

2 for 1

Buy one and get 25% off the second

1.75 2

Buy two and get 50% off the second one

2 for 1.5

Three for the price of two

3 for 2

1. Which of these four different offers gives the biggest price reduction?

Two for the price of one.

Explain your reasoning clearly

If you convert each price reduction to a ratio of # of objects to price, you get: 2:1, 2:1.75, 2:1.5, 3:2. If you compare 2:1, 2:1.75, and 2:1.5, 2:1 is the best because you get 2 objects for the least amount of money. When you compare 2:1 and 3:2, 2:1 is better because 6:3 (2:1 times 3) is better than 6:4 (3:2 times 2).

2. Which of these four different offers gives the smallest price reduction?

Buy one and get 25% off the second.

Explain your reasoning clearly.

When you use the ratios and find a common # of objects of 6, you get 6:3, 6:5.25, 6:4.5, & 6:4. 6:5.25, or 2:1.75, gives the least reduction.