

Percentages Tick or Trash



Who is correct? Jenny or Joshua? Prove it by showing the correct working

Extension: Can you explain what mistake was made?

| No | Question | Working | Jenny | Joshua |
|----|--|---------|------------------------|------------------------|
| 1 | Order these smallest to biggest: 0.5, 3/4 , 20%, 1/10 | | 0.5, 1/10, 3/4, 20% | 1/10, 20%, 0.5, 3/4 |
| 2 | Find 45% of 80 | | 36 | 178 |
| 3 | What is bigger? 86% of 90 90% of 85 | | 86% of 90 | 90% of 85 |
| 4 | What is 3% as a decimal? | | 0.3 | 0.03 |
| 5 | What is 1.7 as a percentage? | | 170% | 17% |
| 6 | There are 35 choc and caramel sweets in a bag. 20% are caramel. How many are choc? | | 7 | 28 |
| 7 | £72 trainers are reduced by 15% in the sale. How much are they now? | | £10.80 | £61.20 |
| 8 | A 330ml can of pop has 10% extra free. How much is in it now? | | 363ml | 340ml |
| 9 | A jacket costs £60 in the sale. If the discount was 20%, how much was it full price? | | £72 | £75 |
| 10 | There are 30 pupils in a class. 30% walk, 1/6 cycle, how many come by bus? | | 16 | 14 |

Percentages Tick or Trash: Solutions

Extension: Can you explain what mistake was made?

| No | Question | Error | Jenny | Joshua |
|----|--|---|------------------------|--|
| 1 | Order these smallest to biggest: 0.5, 3/4 , 20%, 1/10 | | 0.5, 1/10, 3/4, 20% | <mark>1/10, 20%, 0.5,</mark> <mark>3/4</mark> |
| 2 | Find 45% of 80 | Jenny: 80 × 45 ÷ 100 Joshua: 80 × 100 ÷ 45 | <mark>36</mark> | 178 |
| 3 | What is bigger? 86% of 90 90% of 85 | Consider the actual calculations: 90 × 86 ÷ 100 90 × 85 ÷ 100 | <mark>86% of 90</mark> | 90% of 85 |
| 4 | What is 3% as a decimal? | Jenny divided by 10 not 100 | 0.3 | <mark>0.03</mark> |
| 5 | What is 1.7 as a percentage? | Joshua multiplied by 10, not 100 | <mark>170%</mark> | 17% |
| 6 | There are 35 choc and caramel sweets in a bag. 20% are caramel. How many are choc? | Jenny found the number of caramels, not choc | 7 | 28 |
| 7 | £72 trainers are reduced by 15% in the sale. How much are they now? | Jenny found the discount, not the price | £10.80 | <mark>£61.20</mark> |
| 8 | A 330ml can of pop has 10% extra free. How much is in it now? | Josh added on 10, not calculated 10% | <mark>363ml</mark> | 340ml |
| 9 | A jacket costs £60 in the sale. If the discount was 20%, how much was it full price? | Jenny found 20% of 60 and added it on | £72 | <mark>£75</mark> |
| 10 | There are 30 pupils in a class. 30% walk, 1/6 cycle, how many come by bus? | Joshua found the total number who walked and cycled | <mark>16</mark> | 14 |