



Timester Challenge

Percentage Increase and Decrease



<p>Increase 2400 by 36%.</p> <p style="text-align: right;">Bronze ★</p>	<p>Steph sells shoes. She sells each pair of shoes for £120 plus VAT at 17.5%. She sells 250 pairs of shoes in a week. How much money does Steph make.</p> <p style="text-align: right;">Silver ★</p>	<p>In a shop sale, the normal price of a pair of shoes is £68. The shop has a sale. In week 1 of the sale the shoes are reduced by 10%. In week 2 of the sale the shoes are reduced by a further 15%. Maria has £50. Does Maria have enough money to buy the shoes?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: right;">Gold ★</p>
<p>Jon's salary is £45,200. His salary increase by 3%. Work out Jon's new salary.</p> <p style="text-align: right;">Bronze ★</p>	<p>Katie's salary is £27,500 per annum. Katie is offered to options, which option should she choose.</p> <p>Option A : A 2% increase in her salary in line with inflation.</p> <p>Option B: £45 extra a month.</p> <p style="text-align: right;">Silver ★</p>	
<p>Jake buys a watch in a sale. The normal price of the watch is reduced by 20%. The normal price is £89.50. Work out the sale price of the watch.</p> <p style="text-align: right;">Bronze ★</p>		



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Answers

<p>Increase 2400 by 36%.</p> $1.36 \times 2400 = 3,264$ <p>Bronze ★</p>	<p>Steph sells shoes. She sells each pair of shoes for £120 plus VAT at 17.5%. She sells 250 pairs of shoes in a week. How much money does Steph make.</p> $1.175 \times 120 = \text{£}141 \text{ per pair of shoes}$ $141 \times 250 = \text{£}35,250 \text{ per week}$ <p>Silver ★</p>	<p>In a shop sale, the normal price of a pair of shoes is £68. The shop has a sale. In week 1 of the sale the shoes are reduced by 10%. In week 2 of the sale the shoes are reduced by a further 15%. Maria has £50. Does Maria have enough money to buy the shoes?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> $0.9 \times 68 = \text{£}61.20$ $0.85 \times 61.2 = \text{£}52.02$ <p>No Maria is £2.02 short, so she cannot afford the shoes.</p> <p>Gold ★</p>
<p>Jon's salary is £45,200. His salary increase by 3%. Work out Jon's new salary.</p> $1.03 \times 45200 = \text{£}46,556$ <p>Bronze ★</p>	<p>Katie's salary is £27,500 per annum. Katie is offered to options, which option should she choose.</p> <p>Option A : A 2% increase in her salary in line with inflation.</p> <p>Option B: £45 extra a month.</p> $A: 27500 \times 1.02 = \text{£}28,050$ $B: 27500 + (12 \times 45) = \text{£}28,040$ <p>Option A is better by £5.</p> <p>Silver ★</p>	
<p>Jake buys a watch in a sale. The normal price of the watch is reduced by 20%. The normal price is £89.50. Work out the sale price of the watch.</p> $0.8 \times 89.50 = \text{£}71.60$ <p>Bronze ★</p>		