



Grade 8 - Mathematics

Focus on Fractions 6

Memo



A. Calculate the following:

<p>1. Increase 210 by 10%</p> $210 + \left(\frac{10}{100} \times \frac{210}{1}\right)$ $= 210 + \frac{2100}{100}$ $= 210 + 21$ $= 231$	<p>2. Decrease 12 by 50%</p> $12 - \left(\frac{50}{100} \times \frac{12}{1}\right)$ $= 12 - \frac{600}{100}$ $= 12 - 6$ $= 6$
<p>3. Increase 65 by 13%</p> $65 + \left(\frac{13}{100} \times \frac{65}{1}\right)$ $= 65 + \frac{845}{100}$ $= 65 + 8,45$ $= 73,45$	<p>4. Decrease 112 by 5%</p> $115 - \left(\frac{5}{100} \times \frac{115}{1}\right)$ $= 115 - \frac{575}{100}$ $= 115 - 5,75$ $= 109,25$
<p>5. Increase 54 by 15%</p> $54 + \left(\frac{15}{100} \times \frac{54}{1}\right)$ $= 54 + \frac{810}{100}$ $= 54 + 8,10$ $= 62,10$	<p>6. Increase 1000 by 30%</p> $1000 + \left(\frac{30}{100} \times \frac{1000}{1}\right)$ $= 1000 + \frac{30000}{100}$ $= 1000 + 300$ $= 1300$



<p>7. Decrease 75 by 65%</p> $75 - \left(\frac{65}{100} \times \frac{75}{1}\right)$ $= 75 - \frac{4875}{100}$ $= 75 - 48,75$ $= 26,25$	<p>8. Increase 18 by 70%</p> $18 + \left(\frac{70}{100} \times \frac{18}{1}\right)$ $= 18 + \frac{1260}{100}$ $= 18 + 12,6$ $= 30,6$
<p>9. Decrease 439 by 12%</p> $439 - \left(\frac{12}{100} \times \frac{439}{1}\right)$ $= 439 - \frac{5268}{100}$ $= 439 - 52,68$ $= 386,32$	<p>10. Decrease 784 by 73%</p> $784 - \left(\frac{73}{100} \times \frac{784}{1}\right)$ $= 784 - \frac{57232}{100}$ $= 784 - 572,32$ $= 211,68$

B. Solve the following problems:

1. The population of a small town increased by 16% in the space of a year. If the population was 6150 at the beginning of January, what was it at the end of December?

$$6150 + \left(\frac{16}{100} \times \frac{6150}{1}\right)$$
$$= 6150 + \frac{98400}{100}$$
$$= 6150 + 984$$
$$= 7134$$

The population was 7134 people at the end of December



WorksheetCloud

2. Due to a lack of sales, a car dealership decreased the price of a R350 000 car by 8%. What would the new price of the car be?

$$\begin{aligned} & 350\,000 - \left(\frac{8}{100} \times \frac{350\,000}{1} \right) \\ & = 350\,000 - \frac{2\,800\,000}{100} \\ & = 350\,000 - 28\,000 \\ & = 322\,000 \end{aligned}$$

The new price for the car was R322 000.