

## Chapter 8: Percentage

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Q1. Find the value of each of the following:

(c) Decrease 120 by 45%

$$\text{Decrease} = \frac{\overset{9}{\cancel{-45}}}{\underset{-5}{\cancel{100}}} \times \overset{6}{120}$$

$$= 9 \times 6$$

$$= 54$$

$$\text{New Value} = 120 - 54$$

$$= 66$$

(OR)

$$\text{New Value} = \frac{\overset{11}{\cancel{55}}}{\underset{-5}{\cancel{100}}} \times \overset{6}{120}$$

$$= 11 \times 6$$

$$= 66$$

Q2. (d) The result of a number, when decreased by 20%, is 192. Find the number.

New value = 192

Percentage decrease = 20 %

Old value = ?

We have, Old Value =  $\frac{\text{New Value}}{\text{Final Percent}}$

$$= \frac{192}{80/100}$$

$$= 192 \times \frac{\overset{48}{\cancel{100}}}{\underset{-4}{\cancel{80}}}$$

$$= 48 \times 5$$

$$= 240$$

Hence the old number is 240

**Q9. If 10% is deducted from a bill, \$58.50 remains to be paid. How much is the original bill?**

**New Value= \$58.5**

**Percentage decrease = 10%**

**Old value =?**

**We have, Old Value =  $\frac{\text{New Value}}{\text{Final Percent}}$**

$$\begin{aligned} &= \frac{58.5}{90/100} \\ &= 58.5 \times \frac{100}{90} \\ &= \frac{585}{10} \times \frac{10}{9} \\ &= 65 \end{aligned}$$

**Hence the original bill is \$65**