

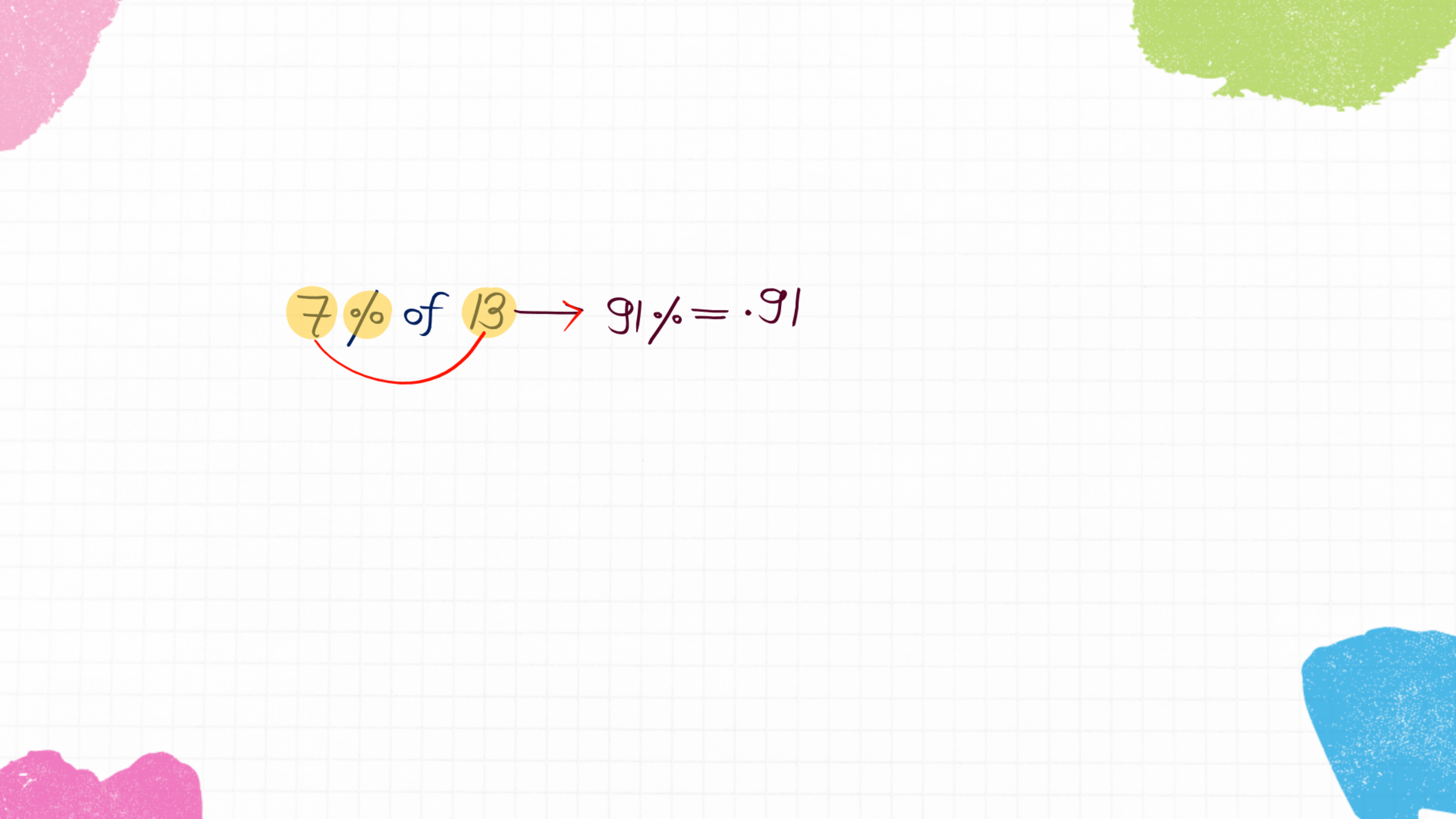
$$\mathbf{x\% \text{ of } y = y\% \text{ of } x = xy\%}$$

$$\underline{\mathbf{x \times \% \times y = y \times \% \times x}}$$

$$34\% \text{ of } 50 = 17$$

$$122\% \text{ of } 70 = 854$$





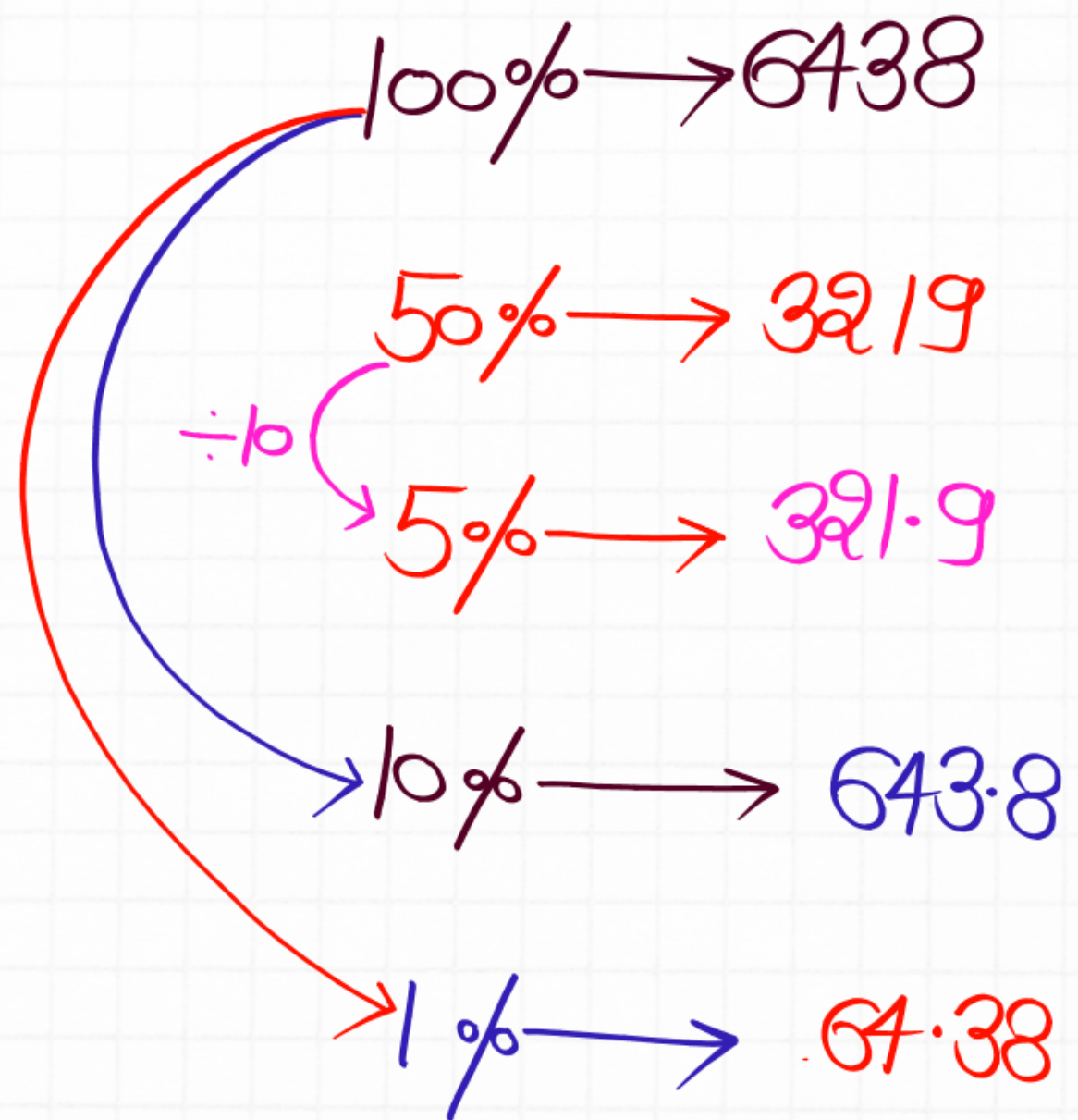
7% of 13 $\rightarrow$ 91% = .91

A hand-drawn mathematical expression on a grid background. The numbers 7, %, and 13 are each enclosed in a yellow circle. A red curved line connects the bottom of the first yellow circle (7) to the bottom of the third yellow circle (13). The word "of" is written in blue between the first and third circles. A red arrow points from the right side of the third yellow circle to the start of the expression "91% = .91". The background is a light gray grid. There are decorative colored shapes in the corners: a pink shape in the top-left, a green shape in the top-right, a pink shape in the bottom-left, and a blue shape in the bottom-right.

Number to percentage(%)

- ❖ ~~20%~~ of ~~740~~ = 148
- ❖ ~~3%~~ of ~~2900~~ = 87
- ❖ ~~550%~~ of ~~700~~ = 3850
- ❖ 22.22% of 189 = $\frac{2}{9} \times 189 = 42$
- ❖ 648% of 37.5 = $\frac{81}{125} \times 37.5 = 243$ ✓



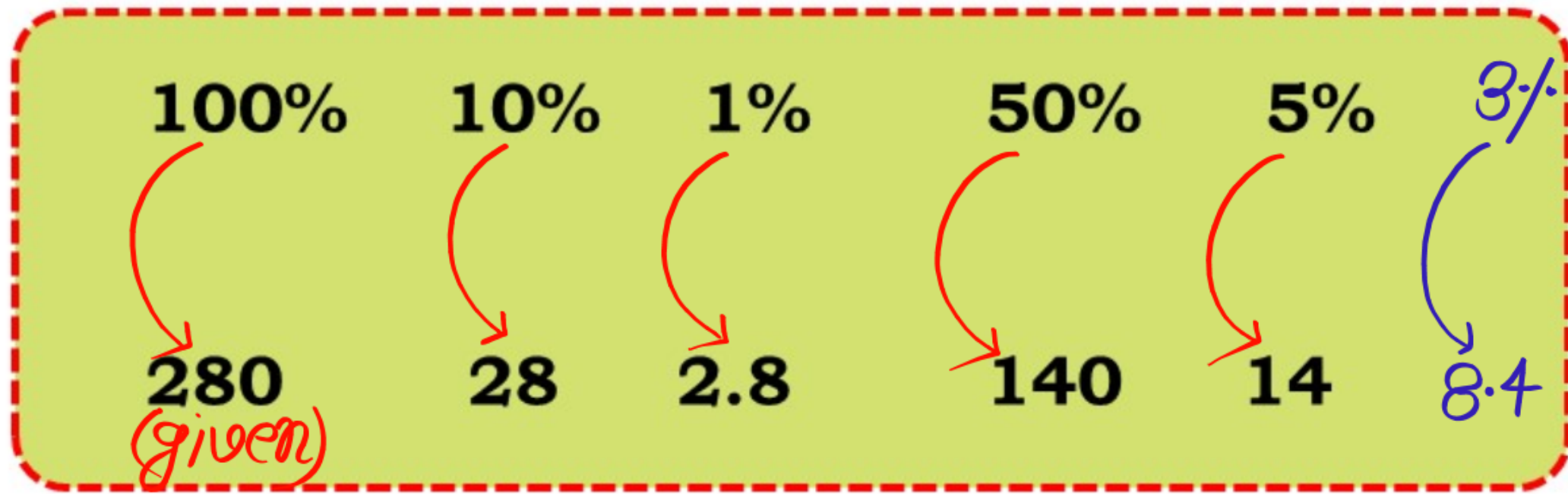


$$13\% \xrightarrow{\times 7} 9.1$$

$$100\% \xrightarrow{\times 7} 70$$

$$57\% \xrightarrow{\times 30} 1710$$

$$44\% \xrightarrow{\times 30} 1320$$



51% of 88 = ?

$$(50\% + 1\%) \times 88$$

$$= 44 + 0.88 = 44.88$$

189% of 436

$$(200\% - 10\% - 1\%) \times 436$$

$$= 872 - 43.6 - 4.36$$

$$= 872 - 47.96 = 824.04$$



306 is what % of 425?

306, 425 का कितना % है?
(Base)

Base $\rightarrow$ 100%

$$425 \times 72\% = 306$$

$$425 \rightarrow 100\%$$

$$1 \rightarrow \frac{100\%}{425}$$

$$306 \rightarrow 306 \times \frac{100\%}{425} = \frac{306}{425} \times 100\% = 72\%$$

Base

EXAMPLE

132 is what % of 330 (Base)

132, 330 का कितना % है।

$$\frac{132}{330} \times 100\% = 40\%$$

209 is what % of 152

209, 152 का कितना % है

Base

$$\frac{209}{152} = \frac{11}{8} = 1 + \frac{3}{8} = 100\% + 37.5\% = 137.5\%$$

143 is what % less than 165

143, 165 से कितना % कम है।

$$\text{Base} \rightarrow \frac{-22}{165} = -\frac{2}{15} \approx 13.33\% \text{ कम}$$

153 is what % more than 102.

153, 102 से कितना % अधिक है।

या

$$\frac{153 - 102}{102} = \frac{51}{102} = \frac{1}{2} = 50\% \text{ more}$$

Multiplying factor

Initial value Final value ^{M.F}

$$N \xrightarrow{+34\%} 134\% \times N = 1.34 \times N$$

$$P \xrightarrow{+20\%} 120\% \times P = 1.2 \times P$$

$$M \xrightarrow{+47\%} 147\% \times M = 1.47 \times M$$

$$L \xrightarrow{-10\%} 90\% \times L = 0.9 \times L$$

$$704 \xrightarrow{-23\%} 704 \times 0.77$$



final value

$$X \xrightarrow[+\frac{1}{6}]{+16.66\%} \left(1 + \frac{1}{6}\right) X = \frac{7}{6} X$$

$$Y \xrightarrow[+\frac{1}{14}]{+7.14\%} \frac{15}{14} Y$$

$$Z \xrightarrow[+\frac{4}{9}]{+44.44\%} \frac{13}{9} Z$$

$$W \xrightarrow[-\frac{1}{16}]{-6.25\%} \frac{15}{16} W$$

$$\pm x\% \xrightarrow{\text{m.f.}} x(100 \pm x)\%$$

or

$$x(1 \pm x\%)$$