

## 8-7 Percent of a #

2 ways to solve → change % to decimal then multiply

OR

→ change % to fraction then mult.

① 20% of 2500

$$\overset{\curvearrowright}{20\%} = 0.2$$

$$0.2 \times 2500$$

$$500.0 = \boxed{500}$$

OR

$$20\% = \frac{20}{100} = \frac{1}{5}$$

$$\frac{1}{5} \cdot \frac{2500}{1} = \boxed{500}$$



③ 36% of 375

$$\begin{aligned} 36\% &= 0.36 \\ 0.36 &\times 375 \end{aligned}$$

	3	7	5	
0	0	0	0	0
1	0	2	1	0
2	1	4	2	0
3	1	8	2	0
	5	0	0	

0.  
3  
6

$$013500 = \boxed{135}$$

OR

$$36\% = \frac{36}{100} = \frac{9}{25}$$

$$\begin{array}{r} 2 \overline{) 36 \ 100} \\ \underline{2 \ 18 \ 50} \\ \phantom{2} \phantom{18} \phantom{50} \phantom{0} \\ \phantom{2} \phantom{18} \phantom{50} \phantom{0} \phantom{0} \end{array}$$

$$\frac{9}{25} \cdot \frac{375}{1} = \boxed{135}$$

④ 47% of 211

47% = 0.47

OR

47% =  $\frac{47}{100}$

0.47 x 211

$\frac{47}{100} \cdot \frac{211}{1} = \boxed{\frac{9917}{100}}$

2 1 1

0	0	0	0
0	8	0	0
9	1	0	0
	4	7	7

0.  
4  
7  
9 1 7

2 1 1

0	0	0	0
0	8	0	0
9	1	0	0
	4	7	7

4  
7  
9 1 7

009917 =  $\boxed{99.17}$

⑤ 0.9% of 80

$$\underbrace{0.9\% = 0.009}$$

$$0.009 \times 80$$

$$\underbrace{720} = \boxed{0.72}$$

or

$$0.9\% = \frac{0.9}{100} = \frac{9}{1000}$$

$$\frac{9}{1000} \cdot \frac{80}{1} = \frac{18}{25}$$

~~1000~~  
250  
50  
25

$$\text{check: } \frac{18 \cdot 4}{25 \cdot 14} = \frac{72}{100}$$