

## Tax, Tips & Markups 10/15

Before:	Now:	New Steps:
<p>DVD: \$20 tax: 7.5%</p> <p><del><math>\frac{7.5}{100} = \frac{x}{20}</math></del></p> <p><math>\frac{100x}{100} = \frac{150}{100}</math> x = \$1.50</p> <p>20 + 1.50 = <span style="border: 1px solid black; padding: 2px;">\$21.50</span></p>	<p><math>\frac{7.5}{100} = 0.075</math> 0.075</p> <p>0.075 x 20 \$1.50 ← How much tax</p> <p>20 + 1.50 = <span style="border: 1px solid black; padding: 2px;">\$21.50</span></p>	<p>1. Turn % into a decimal (Move decimal 2 places left) 2<sup>nd</sup> → 2 (%)</p> <p>2. Multiply \$ and decimal (This the amount of tax, tip or Markup)</p> <p>3. Add</p>

Oct 16-10:09 AM

### Practice

What is 18% of 45?  
x = 18% x 45

① Shirt: \$25  
tax: 4% → 0.04

0.04 x 25 = \$1  
25 + 1 = \$26

② Dinner: \$45  
tip: 18% → 0.18

45 x 0.18 = \$8.10

45.00  
 + 8.10  


---

\$53.10

tax: 5% → 0.05

45 x 0.05 = 2.25

53.10  
 + 2.25  


---

\$55.35

Oct 16-10:20 AM

③ Haircut: \$30  
 tax: 5.5%  
 tip: +16%  
 $21.5\% \rightarrow 0.215$

$$30 \times 0.215 = \$6.45$$

$$30 + 6.45 = \boxed{\$36.45}$$

\* Tax and Tip  
 are the ONLY  
 Percents you can  
 add Together!

Oct 16-10:26 AM

④ CD player: \$22  
 Markup: 30% ← FIRST (0.3)  
 tax: 5% ← 2<sup>nd</sup> (0.05)

$$\begin{array}{l} \text{Markup} \\ 22 \times 0.3 = \$6.60 \end{array}$$

$$22 + 6.60 = \$28.60$$

$$\begin{array}{l} \text{Tax} \\ 28.60 \times 0.05 = \$1.43 \\ + 1.43 \end{array}$$

$$\boxed{\$30.03}$$

Oct 16-10:29 AM