

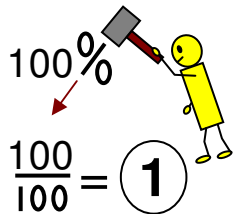
# Language of Percents

Sometimes the words and concepts of percents don't match our perceptions.

## “Large” Percents

- “100%” may sound like a lot, but the Pound the Percent technique shows it's really just 1.
- “200%” sounds large, but the Double DiP technique proves it's only 2.
- “1000%” sounds huge, but it's equivalent to just 10.

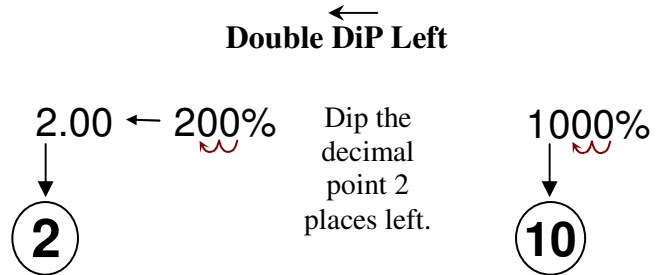
**Pound the Percent**



Pound the % sign down into a 1 and two 0's.

$$\frac{100}{100} = 1$$

**Double DiP Left**



Dip the decimal point 2 places left.

$$2.00 \leftarrow 200\% \rightarrow 2$$

$$1000\% \rightarrow 10$$

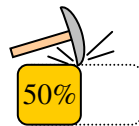
## Percent Of Amount = Percent Times Amount

- “50% of” an amount reasonably sounds like “half,” which is indeed the case.
- “100% of” sounds like it would be more than, but it's actually just equal to the original amount.
- “200% of” an amount means *twice* the original amount.

**Original Amount**

Original

**50% Of**  
(½ times)



“Pick” off a Percent Of

**100% Of**  
(1 times)

100%

**200% Of**  
(2 times)

100%  
100%

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Double DiP left for the best of “times.”

300% = 3 times

400% = 4 times

To solve Percent Of problems:  
Double DiP left × Amount

50% of 100

.5 × 100

50

100% of 100

1 × 100

100

200% of 100

2 × 100

200

1000% of 100

10 × 100

1000

## Your Turn!



20% of 50

300% of 50

600% of 50

2000% of 50

Answers: 10, 150, 300, 1000

## Percent Increase = Amount + Percent Of Amount

Because you're adding to the original, a 50% increase is  $1\frac{1}{2}$  times the original amount.

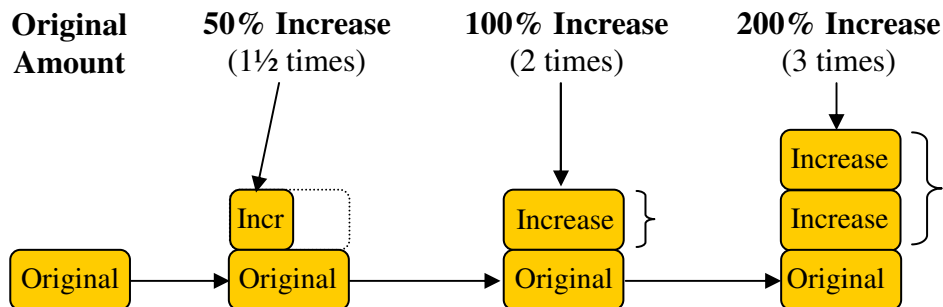
- 50% increase = [Amount + 50% of Amount] = [1 + .5] = 1.5.

A "100% increase" is 2 times the original amount.

- 100% increase = [Amount + 100% of Amount] = [1 + 1] = 2.

A "200% increase" is 3 times the original amount.

- 200% increase = [Amount + 200% of Amount] = [1 + 2] = 3.



**BrainAid**

Imagine the I in Increase is a 1, then learn the rhyme:  
 Double DiP left + 1 increases "times" fun.  
 $300\% + 1 = 4$  times  
 $400\% + 1 = 5$  times

To solve Percent Increase problems:  
 Amount + (Double DiP left × Amount)

**Original Amount: 100**

<u>50% Increase</u>	<u>100% Increase</u>	<u>200% Increase</u>	<u>1000% Increase</u>
$100 + (\underbrace{50\%}_{\text{Double DiP left}} \times 100)$	$100 + (\underbrace{100\%}_{\text{Double DiP left}} \times 100)$	$100 + (\underbrace{200\%}_{\text{Double DiP left}} \times 100)$	$100 + (\underbrace{1000\%}_{\text{Double DiP left}} \times 100)$
$100 + (.5 \times 100)$	$100 + (1 \times 100)$	$100 + (2 \times 100)$	$100 + (10 \times 100)$
$100 + 50$	$100 + 100$	$100 + 200$	$100 + 1000$
150	200	300	1100

## Your Turn!



Original Amount: 50

20% Increase      300% Increase      600% Increase      2000% Increase

Answers: 60, 200, 350, 1050