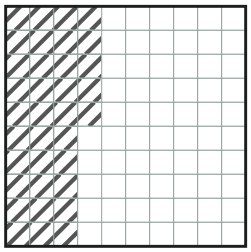
# How Percents Work

What a percent is, and how to find a percent of a number.

## 1. Percent means "out of 100"



This square has 100 small squares, and 35 of them are shaded. That is **35 out of 100**, or **35%**. The same amount can be written as the fraction **35/100** or the decimal **0.35**.

## 2. Percents worth knowing by heart

| 100% | 50% | 25% | 75% | 10% |
|---|---|---|---|---|
| **1 whole** | **1/2** | **1/4** | **3/4** | **1/10** |
| 1 | 0.5 | 0.25 | 0.75 | 0.1 |

## 3. Finding a percent of a number

| 50% | 25% | 10% | 1% |
|---|---|---|---|
| Divide by 2 | Divide by 4 | Divide by 10 | Divide by 100 |
| **50% of 80 = 40** | **25% of 80 = 20** | **10% of 80 = 8** | **1% of 800 = 8** |

**Build other percents from 10%.** To find 30% of 80, find 10% (which is 8) and multiply by 3: 24. To find 5%, take half of 10%. To find 15%, add 10% and 5%.

## 4. A discount, step by step

A $60 game is **20% off**.
10% of 60 is 6, so 20% is **12**. That is the discount.
Sale price: 60 – 12 = **$48**.

## 5. Try it

**50% of 30 = _____** **10% of 250 = _____** **25% of 44 = _____** **30% of 50 = _____**

Answers: 15, 25, 11, 15