



## Using percentages to compare sizes

It's quite easy to **compare percentages** of one particular thing. For example, if your boss offered you the choice of a 10% pay rise or a 20% pay rise, which would you choose?

It would be best to go for 20%! This is the better pay rise as it's a **bigger proportion** of your wage than 10%.

You have to be a bit more careful if you're finding or comparing percentages of **different** things.

**Example** What happens if everyone in a company gets an increase of 50%? They wouldn't all get the same pay rise, because the size of a 50% increase depends on the original wage.

Here are some examples:

Wage	50%	new wage
£100	£50	£150
£150	£75	£225
£200	£100	£300

**Example 2** Consider the same vase on sale in two shops.



50% off £16 is half price. In this shop, the sale price of the vase is **£8**.  
25% off is a quarter off. In this shop, the £10 vase now costs **£7.50**.

Even though the second example (25% off) had less of a percentage saving it is still the cheapest.

**To know the value of a percentage you must know what it's a percentage of.**