

Percentages

A bargain for Gran: Calculating percentages

Ben What can I get for Gran?

 This looks like the sort of place.

 Not what you'd call overcrowded.

 No, I don't know about those.

 What do old people like?

Shop assistant We will be closing in five minutes.

Ben Better be quick.

 What about these?

 No, no.. ooh that! £52.

 £10, £20, OK so £37.

 Oh there must be something.

 Aha! Bargains!

 But they haven't done the maths.

 Oh no, what can I write on?

 Hmm...no, hmm oh cool!

 So I need to work out 35% of £48.

 Well, let's break it down.

 To get 10% of 48 you move the number one place to the right of the decimal point so £4.80.

 So 10% three times takes us to 30% and that leaves 5%. 5% is half of 4.80 which is 2.40.

So adding them up, right hand column, zero, zero, zero, zero.

Three eights are 24 plus four is 28.

Carry the two to the left of the decimal point.

Then three fours are 12 plus two, plus two, is £16.80 off.

So £48 minus £16.80.

Let's take the 16 off first.

48 minus 16 is 32 and take off the 80p that's £31.20.

A bargain and gives me money to spare!

You're gonna love this Gran!

Hey there's another one!

That one looks nicer though and it's reduced to £32 which is £18 off but which one is better value?

I just need to compare the percentage discounts.

The pink one was 35% off and on the right they've knocked £18 off a £50 cardigan.

I can think of the discount as a fraction.

£18 out of £50, 18 over 50.

So how do I make 18 over 50 into a percentage?

To change a fraction into a percentage I need to multiply by a 100.

I need to multiply by 100.

Hmm, that'll take a bit of working out but luckily in this case because the denominator is 50 I can use a simpler method.

Because percentages are out of 100 if I multiply the bottom 50 by two I get 100.

Multiply the top 18 by two, I get 36.

So that's 36 out of 100 which is 36% discount.

Wow! A whole percentage point better value.

(MUSIC)

You deserve it Nan.

(MUSIC)

And I get the banana.