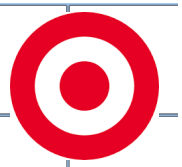
LO: to calculate percentage increases and decreases



How would you find.....

0. 5 %

2. 5 %

1 2. 5 %

LO: to calculate percentage increases and decreases

I do

Percentage Increase

What is Percentage Increase?

Percentage Increase is when you make a number bigger by adding on a given percentage of it.

We often see Percentage Increase in real life in terms of savings accounts or bills, for example the big energy price hike that happened at the beginning of this year.



LO: to calculate percentage increases and decreases

I do

Increasing a number by a percentage

Step 1: Find the percentage of the number

Step 2: Add the percentage to the original number

e.g. Increase 30 by 20%

Step 1: **10% of 30 is 3** So, **20% of 30 is 6**

Step 2: **30 + 6 = 36**

So 30 increased by 20% is 36

LO: to calculate percentage increases and decreases

I do

Increase 2 6 by 1 2%

Increase 1/2kg by 4 5%

LO: to calculate percentage increases and decreases

we do

Example 2



A packet of crisps normally weighs 125g. The packet is increased in weight by 20%. What is the new weight of the packet of crisps?

Step 1

10% of 125 is 12.5 so, 20% is 25

Step 2

125 + 25 = 150

So the packet of crisps now weighs 150g!

LO: to calculate percentage increases and decreases

we do

Your turn...

I put £350 into a savings account.
After a year, the amount has increased by 15% through interest.



How much do I have in there now?

Step 1: 10% is £35

5% is £17.50

So 15% is £52.50

Step 2: £350 + £52.50 = £402.50

De

LO: to calculate percentage increases and decreases

I do

Percentage Decrease

What is Percentage Decrease?

Percentage Decrease is when you make a number smaller by taking away a given percentage of it.

We often see Percentage Decrease in real life in terms of items in a sale or using a discount card.



LO: to calculate percentage increases and decreases

I do

Decreasing a number by a percentage

Step 1: Find the percentage of the number

Step 2: Take away the percentage from the original number

e.g. Decrease 50 by 30%

Step 1: **10% of 50 is 5** So, **30% of 50 is 15**

Step 2: **50 - 15 = 35**

So 50 decreased by 30% is 35

LO: to calculate percentage increases and decreases

I do

Decrease 50 by 15%

Decrease £28 by 38%

LO: to calculate percentage increases and decreases

we do

Example 2



There is a pair of trainers in the sale.
There were originally £60.
They have 20% off.
How much do I pay for them?

Step 1

10% of £60 is £6 so, 20% is £12

Step 2

£60 - £12 = £48

So the trainers are now £48

LO: to calculate percentage increases and decreases.

we do

Your turn...



There are some designer sunglasses in a sale with 45% off.
They were £190 before the sale.
How much are they now?

Step 1: 10% is £19 → 40% is £76

5% is £9.50

So 45% is £85.50

Step 2: £190 - £85.50 = £104.50

LO: to calculate percentage increases and decreases

you do

- Increase £300 by 10%
- Increase £25 by 25%
- Increase £80 by 75%
- Increase 27g by 14%
- Decrease £45 by 5%
- Decrease £50 by 30%
- Decrease £220 by 15%
- A choir has 235 members. 18% of the members leave. How many people are left in the choir now?

- Increase £96 by 15%
- Increase £18 by 55%
- Increase £256 by 5%
- Increase 1/4kg by 9%
- Decrease £72 by 20%
- Decrease £321 by 2%
- Decrease £123.50 by 10%
- Sarah has £324. She spends 5% a year on chocolate. How much does she have left after 3 years? (to the nearest pence)

LO: to calculate percentage increases and decreases

we do

Pink Highlighter ready.....let's mark!

- £330
- £31.25
- £140
- 30.78g
- £42.75
- £35
- £187
- 188

- £110.40
- £27.90
- £268.80
- 272.5g
- £57.60
- £314.58
- £111.15
- £63
- 1st year, 5% = £16.20, £307.80
- 2nd year, 5% of £307.80 = £15.39, £292.41
- 3rd year, 5% of £292.41 = £14.62, £277.79

we do

LO: to calculate percentage increases and decreases

11a. Pippa scored 52 in her flute exam.

She made herself a target of scoring 18% more in her next exam.

What does her score need to be to hit her target?

GD

VF

12a. True or false?

A 26% decrease in price from £35 means there is £9.10 off.



GD

VF

11b. 61.36
12b. True

LO: to calculate percentage increases and decreases

we do

- Kevin is on a salary of £27,500
  He is offered a pay rise of 7% or an extra £150 per month.
  Which should he accept?

- A printer is reduced in a sale by 40%
  The cost of the printer is now £126
  Jim says:

> 40% of £126 is £50.40
> so the printer
> originally cost
> £176.40

Explain why Jim is wrong.

- A conifer is 60cm tall and grows at a rate of 10% per year.
  An oak tree is 40cm tall and grows at a rate of 15% per year.
  After how many years will the oak tree be taller than the conifer?

- Mr Khan buys some potatoes and carrots.





35% of the total weight are carrots.
There are 2.7kg more potatoes than carrots.
How many kg of potatoes does he have?

Attachments

Factor Bugs.pptx