Varied Fluency
Step 6: Percentage Increase and Decrease

National Curriculum Objectives:

Mathematics Year 6: (6R2) Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

Differentiation:

Developing Questions to support calculating percentage increases and decreases. Using 10%, 25%, 50% and 75%.

Expected Questions to support calculating percentage increases and decreases. Using multiples of 5% and 10%.

Greater Depth Questions to support calculating percentage increases and decreases. Using a range of percentages.
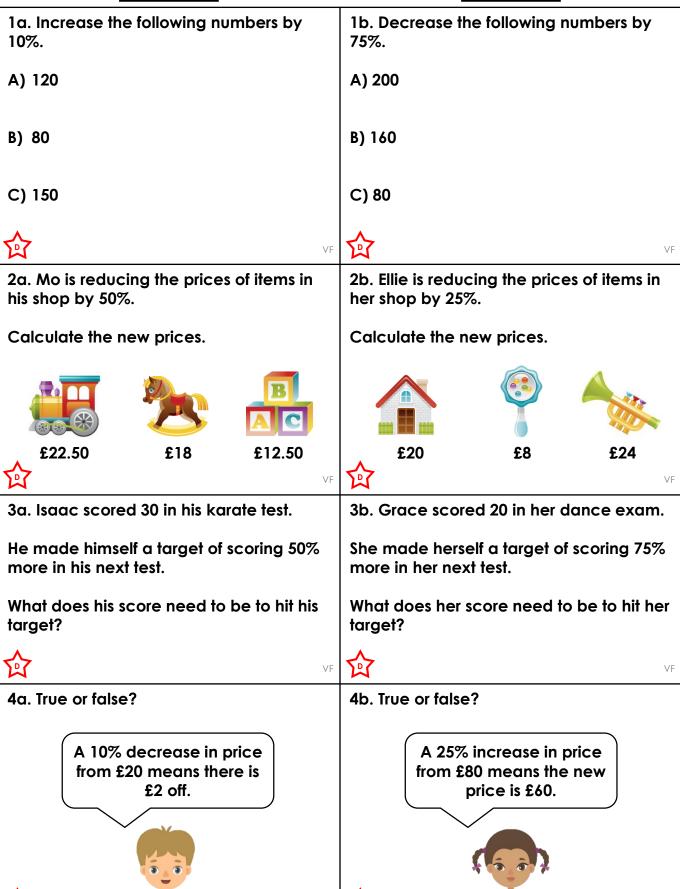
More Year 6 Percentages resources.

Did you like this resource? Don't forget to review it on our website.

Percentage Increase and Decrease

Percentage Increase and Decrease

1a. Increase the following numbers by 10%.

A) 120

B) 80

C) 150

VF

1b. Decrease the following numbers by 75%.

A) 200

B) 160

C) 80

VF

2a. Mo is reducing the prices of items in his shop by 50%.

Calculate the new prices.

£22.50   £18   £12.50

VF

2b. Ellie is reducing the prices of items in her shop by 25%.

Calculate the new prices.

£20   £8   £24

VF

3a. Isaac scored 30 in his karate test.

He made himself a target of scoring 50% more in his next test.

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

VF

3b. Grace scored 20 in her dance exam.

She made herself a target of scoring 75% more in her next test.

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

VF

4a. True or false?

> A 10% decrease in price from £20 means there is £2 off.

VF

4b. True or false?

> A 25% increase in price from £80 means the new price is £60.

VF

Percentage Increase and Decrease

Percentage Increase and Decrease

5a. Increase the following numbers by 15%.

A) 500

B) 160

C) 220

VF

5b. Decrease the following numbers by 30%.

A) 150

B) 330

C) 560

VF

6a. Jaxon is reducing the prices of items in his shop by 30%.

Calculate the new prices.

£12.50   £15   £9.50

VF

6b. Ellie is reducing the prices of items in her shop by 15%.

Calculate the new prices.

£22   £9.20   £15

VF

7a. Isabel scored 40 in her maths test.

She made herself a target of scoring 20% more in her next test.

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

VF

7b. Jacob scored 50 in his English test.

He made himself a target of scoring 15% more in his next test.

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

VF

8a. True or false?

A 45% decrease in price from £50 means there is £22.50 off.

VF

8b. True or false?

A 35% increase in price from £30 means the new price is £40.50.

VF

Varied Fluency – Percentage Increase and Decrease – Year 6 Expected

Percentage Increase and Decrease

Percentage Increase and Decrease

9a. Increase the following numbers by 38%.

A) 28

B) 42

C) 95

VF

9b. Decrease the following numbers by 72%.

A) 145

B) 196

C) 68

VF

10a. Tye is reducing the prices of items in his shop by 12%.

Calculate the new prices.

£9.50 £11.50 £19.50

VF

10b. Ivy is reducing the prices of items in her shop by 8%.

Calculate the new prices.

£21.50 £9.50 £8.50

VF

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?

VF

11b. Eesa scored 45 in his piano exam.

He made himself a target of scoring 22% more in his next exam.

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

VF

12a. True or false?

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

VF

12b. True or false?

An 18% increase in price from £30 means the new price is £36.50.

VF

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Developing
1a. A) 132 B) 88 C) 165
2a. train: £11.25, horse: £9, blocks: £6.25
3a. 45
4a. True

Developing
1b. A) 50. B) 40 C) 20
2b. house: £15, rattle: £6, trombone: £18
3b. 35
4b. False. £100.

Expected
5a. A) 575 B) 184 C) 253
6a. coat: £8.75, shirt: £10.50, trousers: £6.65
7a. 48
8a. True

Expected
5b. A) 105. B) 231 C) 392
6b. rocket: £18.70, stacker: £7.82, teddy: £12.75
7b. 57.5
8b. True

Greater Depth
9a. A) 38.64 B) 57.96 C) 131.1
10b. xylophone: £8.36, robot: £10.12, car: £17.16
11b. 61.36
12b. True

Greater Depth
9b. A) 40.6 B) 54.88 C) 19.04
10b. spaceship: £19.78, boat: £8.74, bucket and spade: £7.82
11b. 54.9
12b. False, £35.40