




Steps to Success

Date	02.02.21
Subject/s	Maths
Learning Objective 	To increase and decrease amounts with percentages

SA 	TA 

Success Criteria ✓! 	I can find a percentage of an amount		
	I can add the amount for increase and subtract for decrease		
	I can show my working using a bar model		
Support	Independent	Adult Support ()	Group Work

Lockdown learning: DC

Pre-task

The price of houses has decreased by 10% in the last year. Use a bar model to represent the percentage decrease and to complete the table.

House	Original Cost	10% decrease	New cost
A	£235,650	£212,085	212,085
B	£145,950	£131,355	£131,355
C	£327,600	£294,840	£294,840

Teacher led

Fluency

Teacher led:

SALE!

£5.



£5	
£2.50	

1) Increase 60 by 10%.

60									
6	6	6	6	6	6	6	6	6	6

$$60 \div 10 = 6$$

$$60 + 6 = 66$$

2) Decrease 125 by 10%.

125									

$$125 \div 10 = 12.5 \quad - \begin{array}{r} 125.0 \\ - 12.5 \\ \hline 112.5 \end{array}$$

3) Increase 60 by 50%.

$$60 \div 2 = 30$$

$$60 + 30 = 90$$

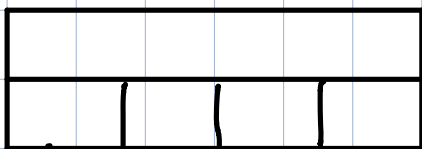
4) Decrease 50 by 50%.



$$\begin{array}{r} 50 \\ - 25 \\ \hline 25 \end{array}$$

$$50 \div 2 = 25$$

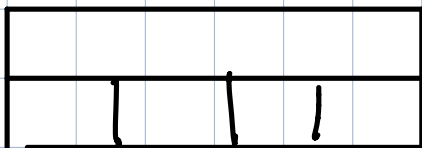
5) Increase 100 by 25%.



$$\begin{array}{r} 100 \\ + 25 \\ \hline 125 \end{array}$$

$$100 \div 4 = 25$$

b) Decrease 250 by 25%.



$$\begin{array}{r} 250 \\ - 62.5 \\ \hline 187.5 \end{array}$$

$$250 \div 4 = 62.5$$

To find 10%, divide your whole by 10.

To find 50%, divide your whole by 2.

To find 25%, divide your whole by 4.

Increase = add +

Decrease = subtract . -

Fluency A.

Increase by 10% ↑

1) 60

2) 12

3) 35

4) 765

Decrease by 10% ↓

1) 90

2) 17

3) 26

4) 520

Fluency B

Increase by 50%.

1) 30

2) 29

3) 973

4) 506

Decrease by 50%.

1) 64

2) 80

3) 944

4) 16

Fluency C

Increase by 25%.

1) 100

2) 40

3) 66

4) 50

Decrease by 25%.

1) 200

2) 560

3) 400

4) 80

Problem Solving and Reasoning

Use it!



Football tickets cost £46.80 after a 20% decrease.

Explain it!



Cindy says,



The original tickets cost £56.16

Can you explain her mistake?

Explain it!



James says,



Decreasing a number by 13% is the same as finding 87% of that number.

Do you agree?

Explain it!



Tamzin has an amount of money saved.
The amount is increased by 25%
The new amount is then decreased by 25%

Does Tamzin have the same amount of money as she started with?

Explain your answer.

Prove it!



Then prove it with your answer