

Year 2 Maths: Two Step Problems

Tuesday 26.01.21

HOME
LEARNING

Today we will use
our learning to
solve 2 step
problems.



Fluency

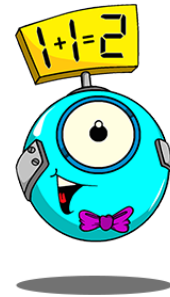
Solve these calculations:

$$38 + 38 =$$

$$54 - 37 =$$

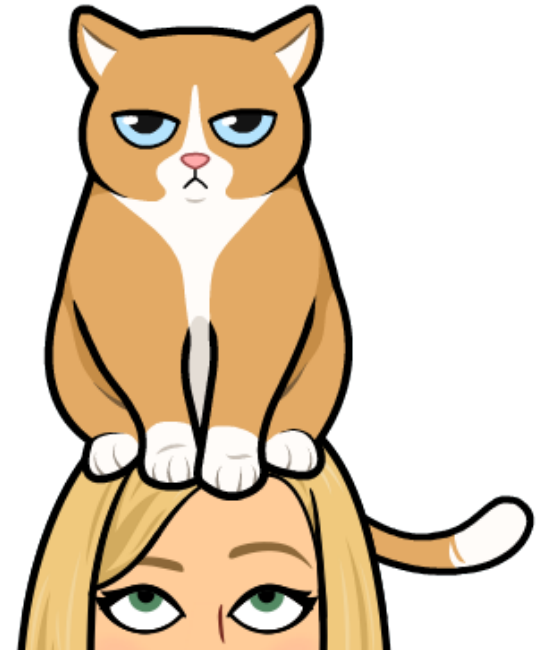
$$74 - 28 =$$

$$56 - 44 =$$



Write number stories for the calculations

There are 47 tins of cat food in Mrs Riley's cupboard. This week her cats eat 19 tins. How many tins are left?






Vocabulary

Number - Place Value Year 2

Tens and Ones

A 2-digit number has tens and ones.




Tens	Ones
3	4

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Addition & Subtraction Year 2

Crossing 10

Going past a multiple of 10 when you are adding or subtracting.

$$17 + 5 = 22$$


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Addition & Subtraction Year 2

Calculation

Working out the answer to a maths problem.


$$4 + 5 = 9$$
$$10 - 5 = 5$$
$$20 - 4 = 16$$

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Number - Place Value Year 2

Partition

To split/ separate/ divide numbers into smaller parts. This can make calculations easier.



You can also partition smaller numbers.



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Addition & Subtraction Year 2

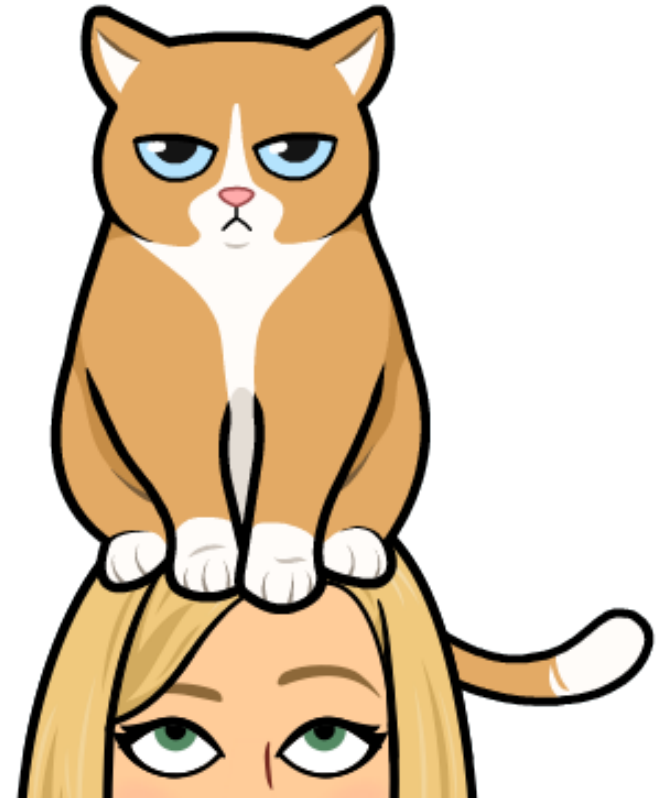
Efficient

Working in a way without wasting time.

$$18 + 6 =$$

An efficient way of adding would be to count on from 18 instead of starting from 0.

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Recap

How much will these 2 items cost altogether?



Recap

How much will these 2 items cost altogether?

$$\begin{array}{r} 31\text{p} \\ 45\text{p} \\ \hline 76\text{p} \end{array}$$

Did you use
column method
or a number
line. Either way is
fine.



Recap

How much change will I get if I buy the ice cream?

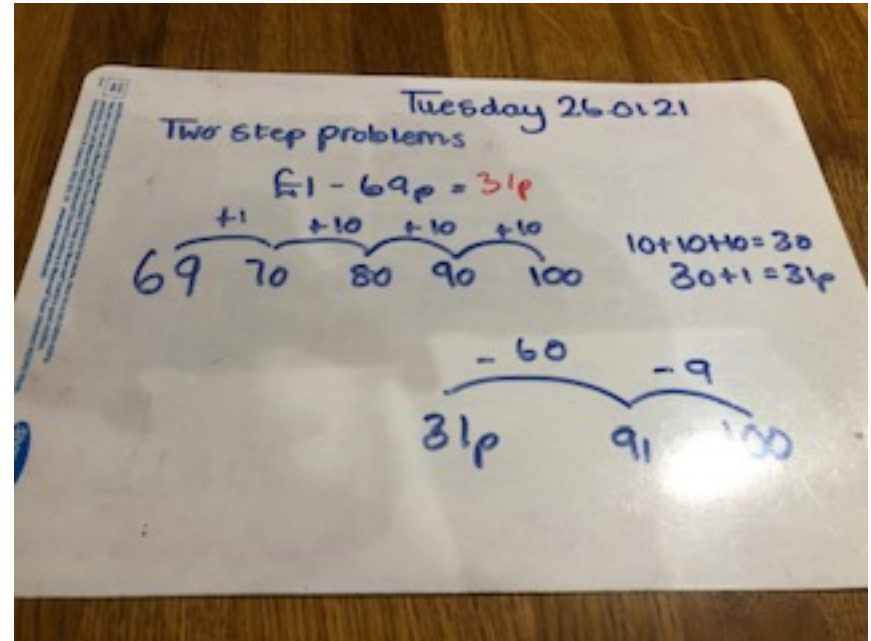


Use your learning from yesterday to help you.



Recap

How much change will I get if I buy the ice cream?

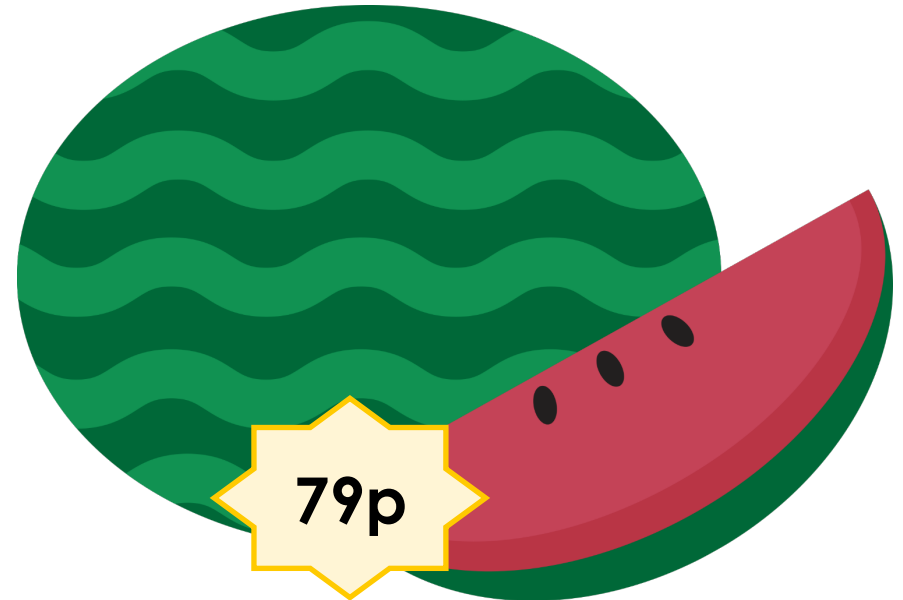
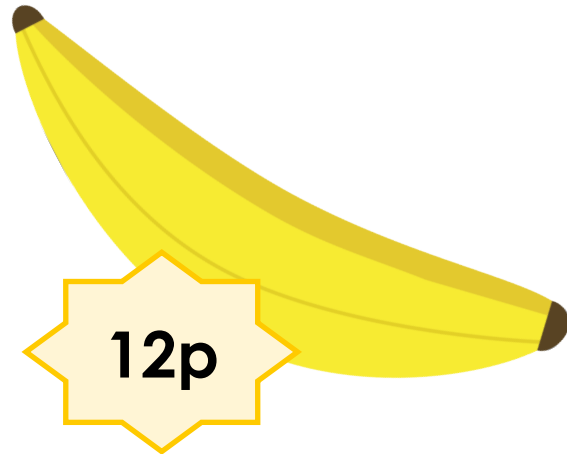


$$£1 - 69p = 31p$$

Did you count on or count back?

Explore

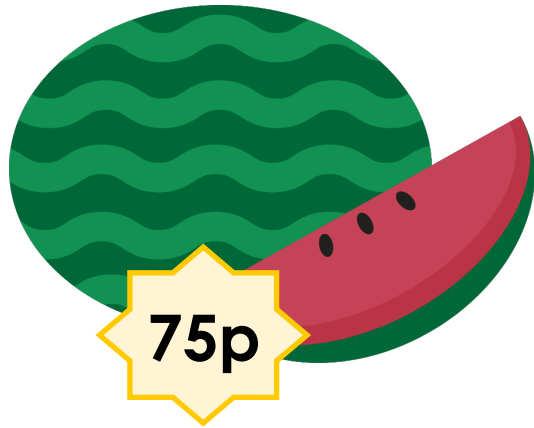
I want to buy both pieces fruit.



What do I need to do to work out how much change I need?

Explore

Add the costs to find the total.



87	
12	75

$$12 + 75 = 87\text{p}$$

100	
87	13

$$100 - 87 = \underline{\quad}\text{p}$$

Subtract the total cost to find the change.

Guided Practice

It is important to think carefully about what the question tells us.



Mrs Riley had £10.

What does this mean?

She was given £5 more.



She bought a book.

If she buys something does she have more or less?

How much does she have now?

Talk to your grown up about your ideas.

Guided Practice

It is important to think carefully about what the question tells us.



Mrs Riley had £10.

More tells me I have to add.

She was given £5 more.



She bought a book.

If I buy something, I am using my money so I will have less.
This tells me I need to subtract.

How much does she have now?

Guided Practice

When we understand the language, we can choose the correct calculation.



Mrs Riley had £10.

She was given £5 more.

15	
10	5

$$£10 + £5 = \underline{\quad}$$



She bought a book

15	
2	13

$$£15 - £2 = \underline{\quad}$$

How much does she have now?

Guided Practice

When we understand the language, we can choose the correct calculation.



Mrs Riley had £10.

She was given £5 more.

She bought a book

How much does she have now?



We find out how much money Mrs Riley has altogether.

$$£10 + £5 = £15$$

We then subtract the cost of the book from £15

$$£15 - £2 = £13$$

15	
10	5

$$£10 + £5 = £15$$

15	
2	13

$$£15 - £2 = £13$$

Guided Practice

I buy 2 apples.

How much change will I get?



Talk to your grown up about your ideas.

TIME TO TALK



Guided Practice

I buy 2 apples.

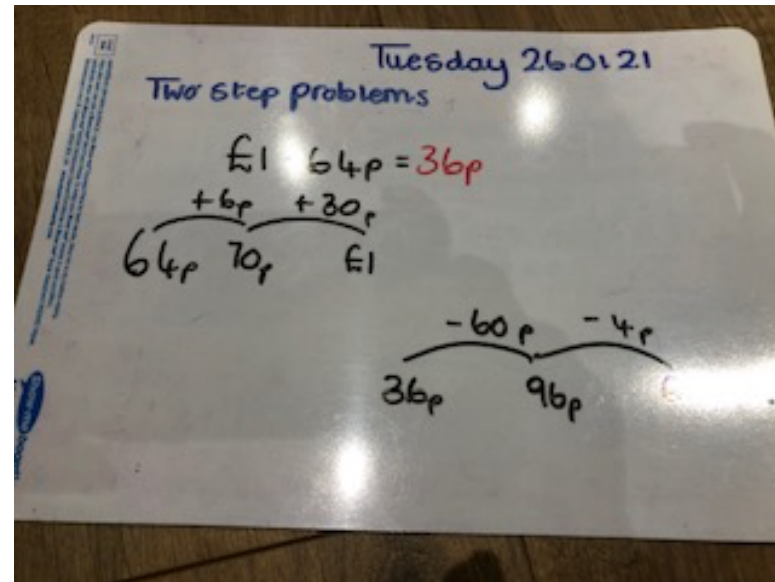
How much change will I get?



1 apple costs $32\text{p} + 32\text{p}$.

2 apples cost 64p .

$$£1 - 64\text{p} = 36\text{p}$$



Guided Practice

What is happening in this problem?

Minie has 30p.

Alfie has 20p.

 Cookies

35p

They put their money together to buy a packet of biscuits.

How much money will they have left?

$$30p \text{ } \underline{\hspace{1cm}} \text{ } 20p = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1cm}} \text{ } \underline{\hspace{1cm}} \text{ } \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Guided Practice


What is happening in this problem?

Minie has 30p.

Alfie has 20p.



Cookies



35p

They put their money together to buy a packet of biscuits.

How much money will they have left?

We need to find out how much money Minie and Alfie have altogether. We need to add 30p and 20p.

Once we have done that, we can subtract the cost of the biscuits to find the change.

Guided Practice

What is happening in this problem?

Cookies

35p

Minie has 30p.

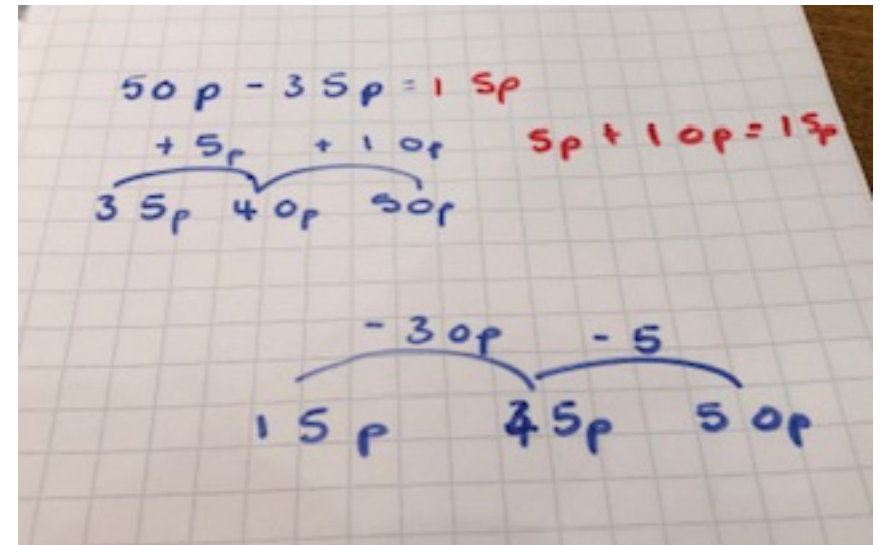
Alfie has 20p.

$$30\text{p} + 20\text{p} = 50\text{p}$$

$$50\text{p} - 35\text{p} = 15\text{p}$$

They put their money together to buy a packet of biscuits.

How much money will they have left?



Independent Task

Work out how much change you will get from £1.



Price List

Wonka Bar	29p
Everlasting Gobstoppers	37p
Nerd and Dweebs	16p
Wonka's Xploder Bar	35p
Fizzy Pop Tops	23p

You buy:

- 1 Wonka Bar + 1 Fizzy pop Top
- 2 Wonka Bars
- 1 Nerd and Dweebs + 1 Gobstopper
- 1 Xploder Bar + 1 Gobstopper
- 2 Gobstoppers + 1 Fizzy Pop Top
- 2 Nerds and Dweebs + 1 Wonka Bar
- 1 Fizzy Pop Top + 1 Nerds and Dweebs.



Check your final answer using an addition.

If you're finding things tricky, try this...

1 Complete the bar models and write the calculations.

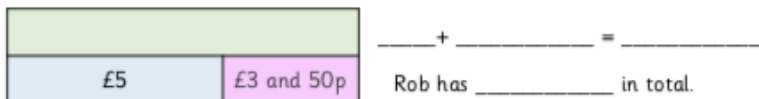
a Kat has £3 in her purse. She is given £1 and 50p more.
Fill in the bar model and write a calculation to show her total.



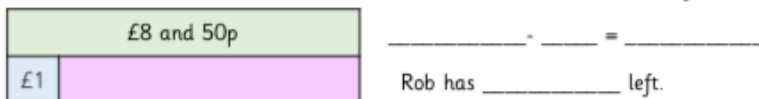
Kat then buys a bag of sweets for 20p.
Fill the bar model and write the calculation to show how much she has left.



b Rob has £5 in his wallet. He is given £3 and 50p more.
Fill in the bar model and write a calculation to show his total.



Rob then buys a pen for £1.
Fill the bar model and write the calculation to show how much he has left.



c Tam has £10 in her money bank. She is given £5 more.
Fill in the bar model and write a calculation to show her total.



Tam then buys a pair of gloves for £3.
Fill the bar model and write the calculation to show how much she has left.



1 Solve the following problems.



a Ben has these coins. How much does Ben have altogether?

_____ + _____ + _____ + _____ + _____ = _____

b Ben spends 20p. How much does he have left?

_____ - _____ = _____

2 Solve the following problems.



a Che has these coins. How much does Che have altogether?

_____ + _____ + _____ + _____ + _____ = _____

b Che spends £1 and 5p. How much does he have left?

_____ - _____ = _____

3



The coins below total £1 and 85p.
If I spend 55p I would have £1 and 35p left.



Is Matt correct? Explain how you know.

If you want a challenge...

1 Complete the bar models and write the calculations.

- a Kat has £30 in her money bank. She is given £50 more.
Fill in the bar model and write a calculation to show her total



- Kat then buys a handbag for £25.
Fill the bar model and write the calculation to show how much she has left.



2 Solve the following problems.



- a Rob has these coins. How much does Rob have altogether?

_____ + _____ + _____ + _____ + _____ + _____ = _____

- b Rob spends 44p. How much does he have left?

_____ - _____ = _____

3 Calculate the total cost then how much change will be received.

- a Jess buys a skirt costing £18 and a jumper costing £16.
She pays with a £50 note.

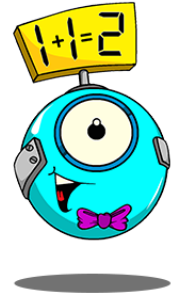
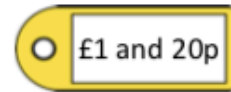
_____ + _____ = _____

How much change will she receive?

_____ - _____ = _____



1



Sue has four 20p coins.

Sue is given an extra 20p coin off her Grandma.

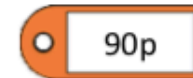
Does Sue have enough to buy the bananas?

Explain how you know.

2 Jess says,



I have £1 and 20p.
I bought a biscuit for 40p and I would like to buy the doughnuts shown below.



Explain why the shopkeeper will not sell Jess a doughnut.

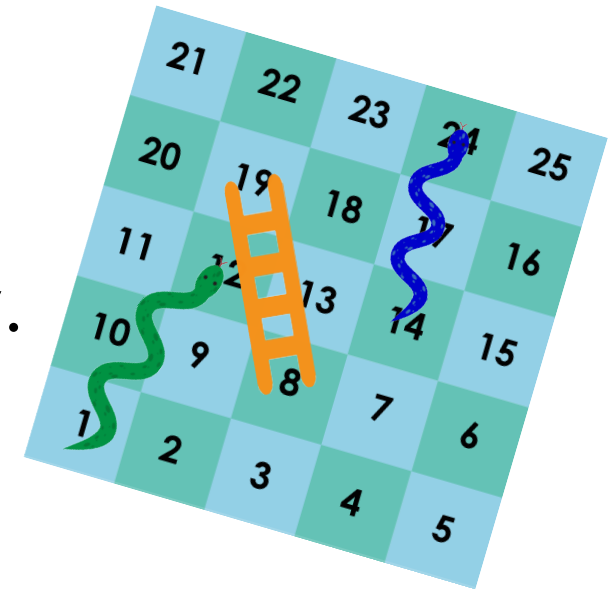
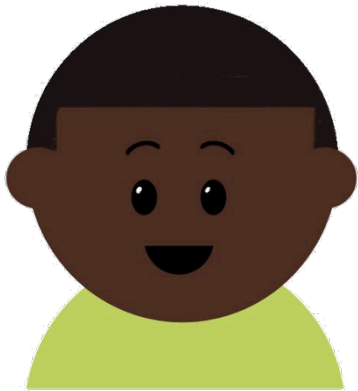
Exit task – Dong Nao Jin

Caleb had £15.

He spent £5 on the game.

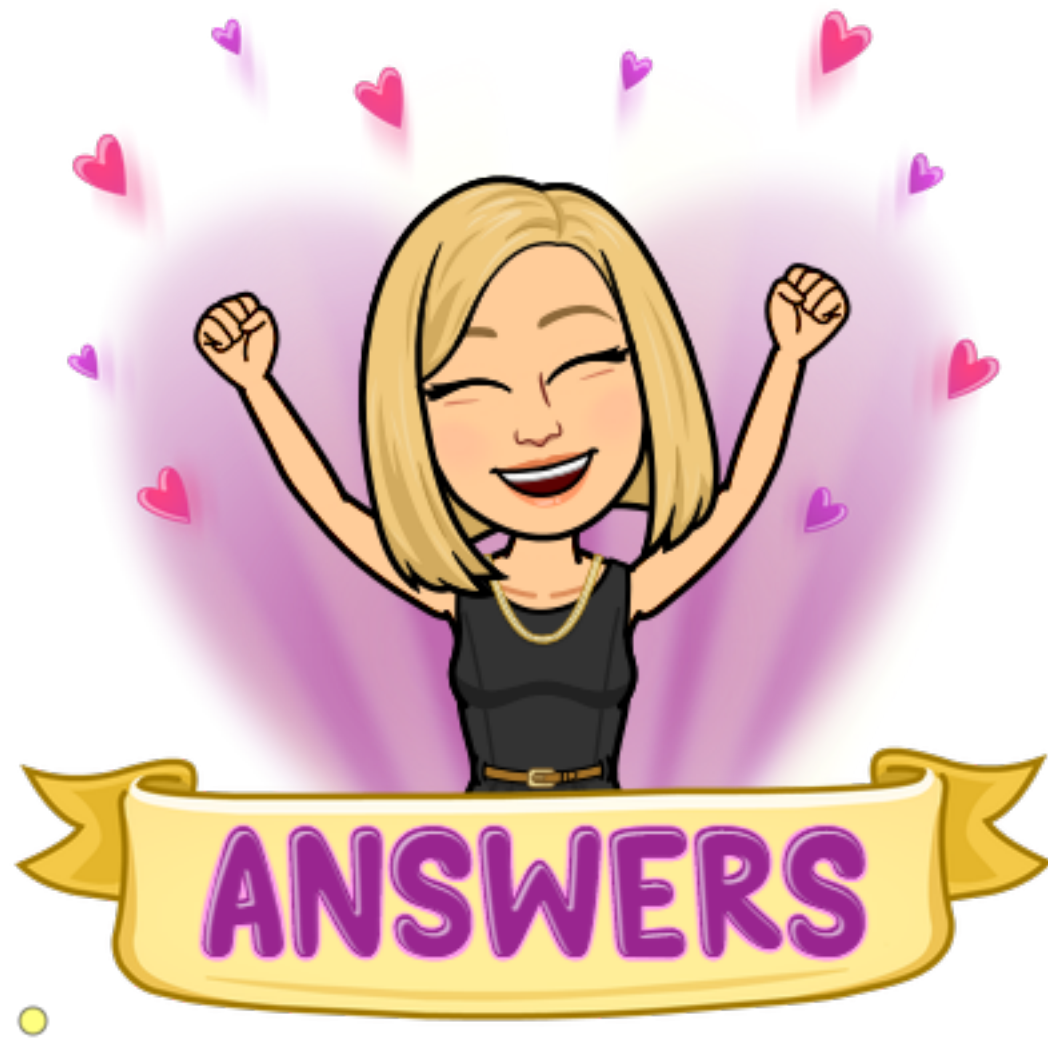
He was given some pocket money.

Now he has £14.



How much pocket money was he given?

Send your answers to me via
our class e-mail.



Answers

Solve these calculations:

$$38 + 38 = 76$$

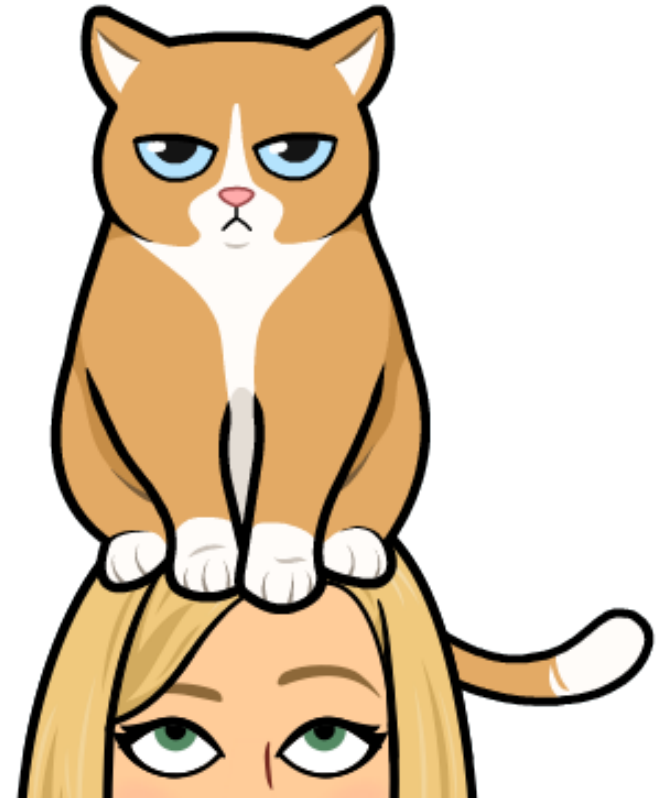
$$54 - 37 = 17$$

$$74 - 28 = 46$$

$$56 - 44 = 12$$

$$47 - 19 = 28$$

There are 28 tins left.

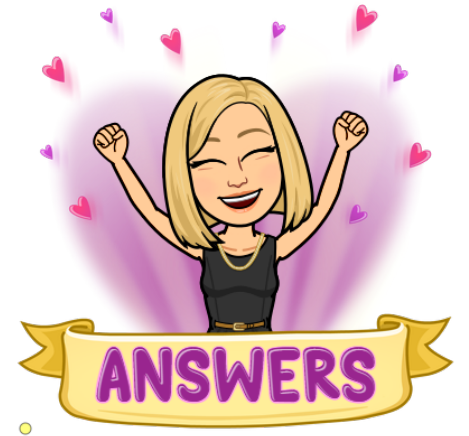


Independent Task

Work out how much change you will get from £1.

You buy:

- 1 Wonka Bar + 1 Fizzy pop Top = 52p $£1 - 52p = 48p$
2 Wonka Bars = 58p $£1 - 58p = 42p$
1 Nerd and Dweeb + 1 Gobstopper = 53p $£1 - 53p = 47p$
1 Xploder Bar + 1 Gobstopper = 72p $£1 - 72p = 28p$
2 Gobbstoppers + 1 Fizzy Pop Top = 97p $£1 - 97p = 3p$
2 Nerds and Dweebs + 1 Wonka Bar = 61p $£1 - 61p = 39p$
1 Fizzy Pop Top + 1 Nerds and
Dweebs. = 39p $£1 - 39p = 61p$



1 Complete the bar models and write the calculations.

- a Kat has £3 in her purse. She is given £1 and 50p more.
Fill in the bar model and write a calculation to show her total.



Kat then buys a bag of sweets for 20p.
Fill the bar model and write the calculation to show how much she has left.



- b Rob has £5 in his wallet. He is given £3 and 50p more.
Fill in the bar model and write a calculation to show his total.



Rob then buys a pen for £1.
Fill the bar model and write the calculation to show how much he has left.



- c Tam has £10 in her money bank. She is given £5 more.
Fill in the bar model and write a calculation to show her total.



Tam then buys a pair of gloves for £3.
Fill the bar model and write the calculation to show how much she has left.



1 Solve the following problems.



- a Ben has these coins. How much does Ben have altogether?

$$\underline{20\text{p}} + \underline{10\text{p}} + \underline{5\text{p}} + \underline{2\text{p}} + \underline{1\text{p}} = \underline{38\text{p}}$$

- b Ben spends 20p. How much does he have left?

$$\underline{38\text{p}} - \underline{20\text{p}} = \underline{18\text{p}}$$

2 Solve the following problems.



- a Che has these coins. How much does Che have altogether?

$$\underline{\pounds 1} + \underline{20\text{p}} + \underline{10\text{p}} + \underline{10\text{p}} + \underline{5\text{p}} = \underline{\pounds 1 \text{ and } 45\text{p}}$$

- b Che spends £1 and 5p. How much does he have left?

$$\underline{\pounds 1 \text{ and } 45\text{p}} - \underline{\pounds 1 \text{ and } 5\text{p}} = \underline{40\text{p}}$$

3



The coins below total £1 and 85p.
If I spend 55p I would have £1 and 35p left.



Is Matt correct? Explain how you know.

No, Matt is not correct.

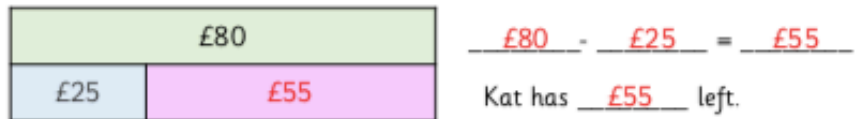
£1 and 85 - 55p = £1 and 30p.

1 Complete the bar models and write the calculations.

- a Kat has £30 in her money bank. She is given £50 more.
Fill in the bar model and write a calculation to show her total



- Kat then buys a handbag for £25.
Fill the bar model and write the calculation to show how much she has left.



2 Solve the following problems.



- a Rob has these coins. How much does Rob have altogether?

$$\underline{\pounds 2} + \underline{10p} + \underline{2p} + \underline{20p} + \underline{2p} + \underline{\pounds 1} = \underline{\pounds 3 \text{ and } 34p}$$

- b Rob spends 44p. How much does he have left?

$$\underline{\pounds 3 \text{ and } 34p} - \underline{44p} = \underline{\pounds 2 \text{ and } 90p}$$

3 Calculate the total cost then how much change will be received.

- a Jess buys a skirt costing £18 and a jumper costing £16.
She pays with a £50 note.

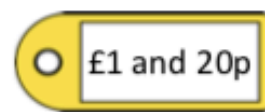
$$\underline{\pounds 18} + \underline{\pounds 16} = \underline{\pounds 34}$$

How much change will she receive?

$$\underline{\pounds 50} - \underline{\pounds 34} = \underline{\pounds 16}$$



1



Sue has four 20p coins.

Sue is given an extra 20p coin off her Grandma.

Does Sue have enough to buy the bananas?

Explain how you know.

No because she only has £1 in total.

She would need 20p more.

£1 and 20p > £1.

2 Jess says,



I have £1 and 20p.
I bought a biscuit for 40p and I would like to buy the doughnuts shown below.



Explain why the shopkeeper will not sell Jess a doughnut.

£1 and 20p - 40p = 80p.

90 > 80p.

Jess does not have enough money to buy the doughnut.

SUPER WORK

