

# Year 4 Maths, 20<sup>th</sup> April 2020

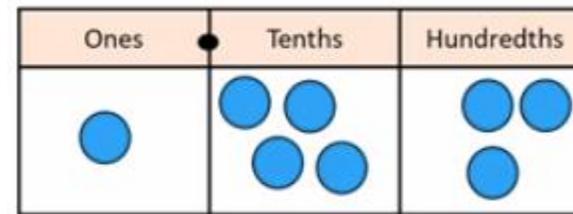
LO: make a whole from decimal parts

- ▶ SOME WILL EVEN add a mix of fractions and decimals to make 1
- ▶ SOME will add a mix of decimals with 1dp and 2dp to make 1
- ▶ MOST will complete decimal part / whole models to make 1
- ▶ ALL will use a hundred square to find two decimal numbers that total 1

# IMPORTANT!

- ▶ In this week's maths lessons, the answers are given after each set of questions. Don't look at the answers until you have had a go at the questions for yourself.
- ▶ If your answers are wrong, please find your mistake and correct it before you move on to the next set of questions.

- ▶ RECALL
- ▶ Divide 32 by 100.
- ▶ What number is represented in the grid?
- ▶ Write  $\frac{3}{10}$  as a decimal.
- ▶ What is 1,000 less than 8,796?



► RECALL

► Divide 32 by 100.

To divide a number by 100, we move its digits two place value columns to the right.

So 32 divided by 100 is 0.32

► What number is represented in the grid?

1.43

► Write  $\frac{3}{10}$  as a decimal.

You just need to put the digit 3 in the tenths column. Don't forget the place holder zero in the ones column.

0.3

► What is 1,000 less than 8,796?

This is a subtraction question.  $8,796 - 1,000$

You don't need to do a column subtraction to solve this - just take one from the thousands column.

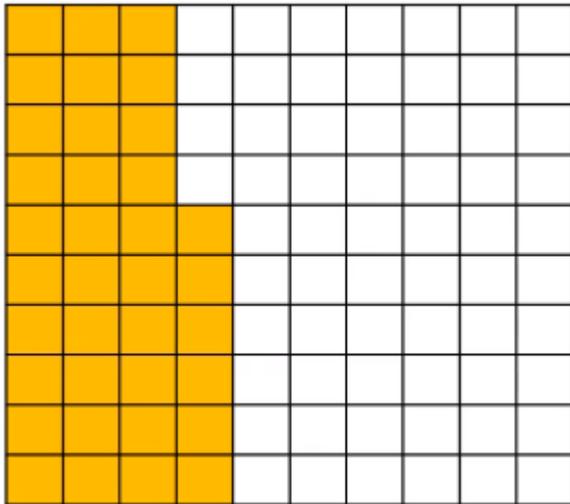
7,796

Ones	Tenths	Hundredths
●	●● ●●	●● ●

1 . 4 3

Today we are going to be making a whole (one) out of decimal numbers and fractions.

- ▶ This hundred square has 36 parts shaded. That's 36 hundredths, or 0.36

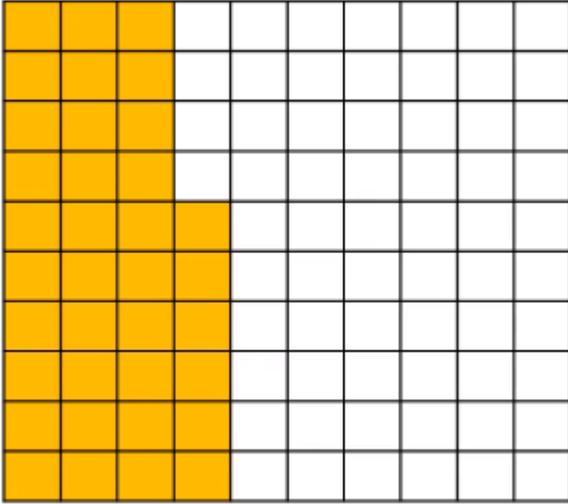


$$36 \text{ hundredths} = \frac{36}{100} = 0.36$$

- ▶ What would we have to add to make one whole?

$$36 \text{ hundredths} + \quad ? \quad = 1 \text{ whole}$$

- ▶ You can see that there are 36 parts shaded and 64 parts not shaded.



$$\begin{aligned} 36 \text{ hundredths} + 64 \text{ hundredths} &= 1 \text{ whole} \\ \frac{36}{100} + \frac{64}{100} &= \frac{100}{100} = 1 \end{aligned}$$

- ▶ We can also write this using decimal numbers.

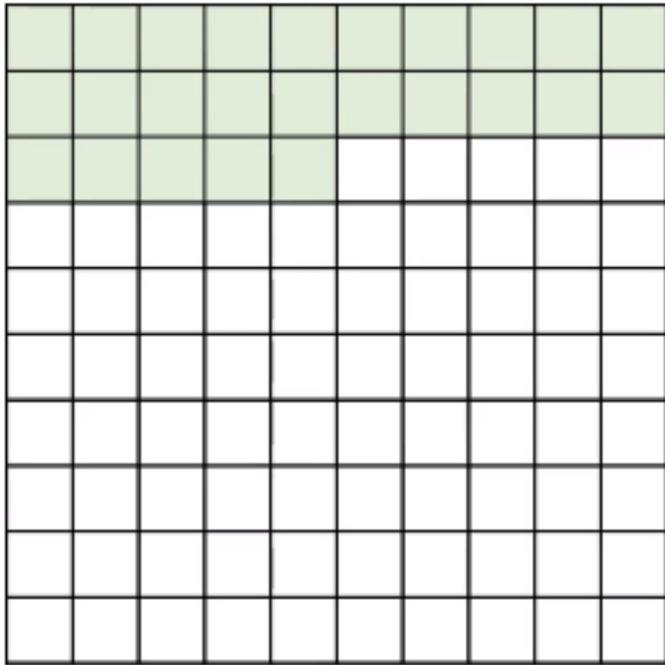
- ▶  $0.36 + 0.64 = 1.00$

We would usually just write this as 1

$0.35 + 0.64 = 1$

- ▶
- ▶

Have a go



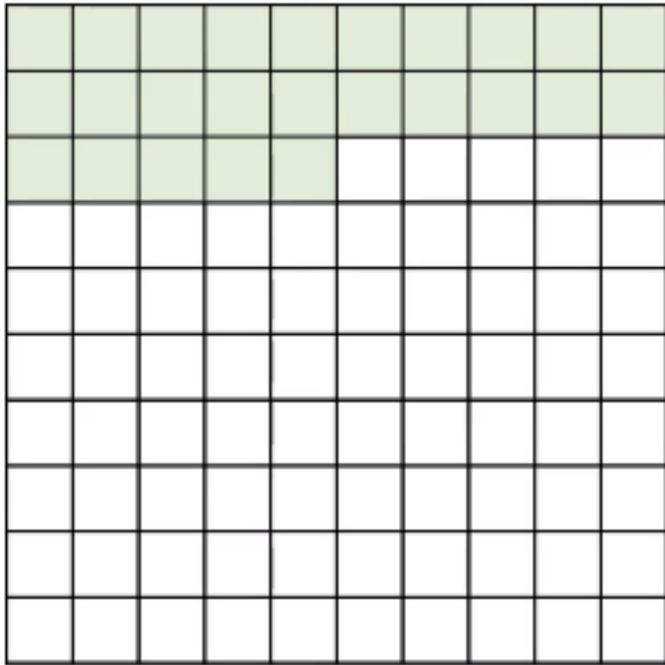
25 hundredths +

= 1 whole

$$\frac{9}{100} + \frac{\square}{100} = 1$$

$$+ 0.46 = 1$$

Have a go

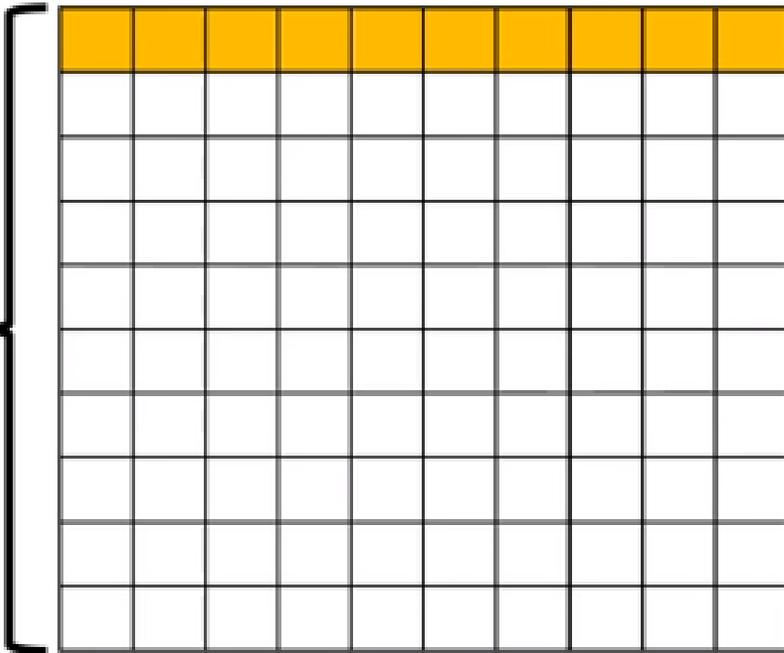


25 hundredths + 75 hundredths = 1 whole

$$\frac{9}{100} + \frac{91}{100} = 1$$

$$0.54 + 0.46 = 1$$

1 row shaded



$$\begin{aligned} &= 10 \text{ hundredths} = \frac{10}{100} \\ &= 0.10 = 0.1 \end{aligned}$$

$$\begin{aligned} &= 1 \text{ tenth} = \frac{1}{10} \\ &= 0.1 \end{aligned}$$

This hundred square shows that **ten hundredths** are the same as **one tenth**.

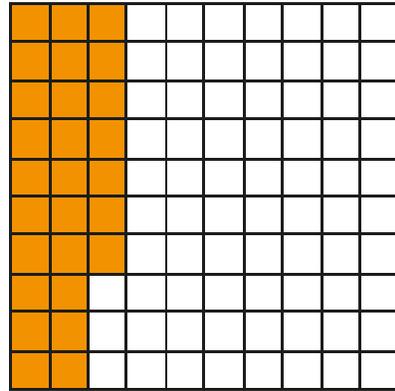
If we are making a whole out of tenths, we can use number bonds to ten to find the missing part.

$$0.1 + 0.9 = 1$$

# Intelligent practice

## ► ONE CHILLI

Here is a hundred square.



a) How many hundredths are shaded?

b) How many more hundredths do you need to shade so that the whole hundred square is shaded?

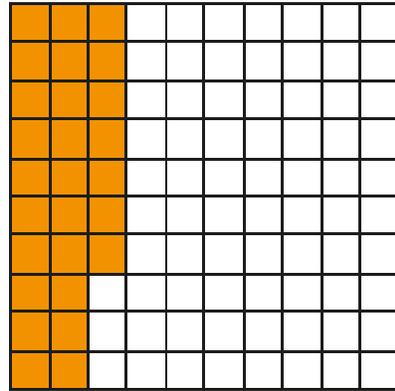
c) Complete the sentence.

hundredths +  hundredths = 1 whole

# Intelligent practice

► ONE CHILLI ANSWERS

Here is a hundred square.



a) How many hundredths are shaded?

27

b) How many more hundredths do you need to shade so that the whole hundred square is shaded?

73

c) Complete the sentence.

27

hundredths +

73

hundredths = 1 whole

# TWO CHILLIES

Fill in the missing digits.

a) 1 tenth =  hundredths

d) 32 hundredths =

b)  $\frac{2}{10} = \frac{\text{}}{100}$

e) 0.4 =  tenths

c) 70 hundredths =  tenths

f) 50 hundredths =

## TWO CHILLIES answers

Fill in the missing digits.

a) 1 tenth =  hundredths

b)  $\frac{2}{10} = \frac{\text{input } 20}{100}$

c) 70 hundredths =  tenths

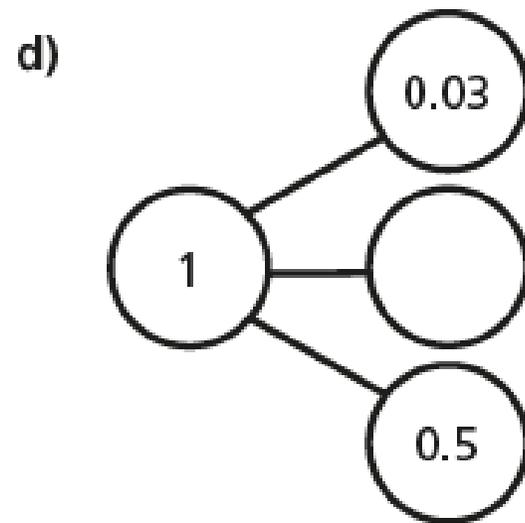
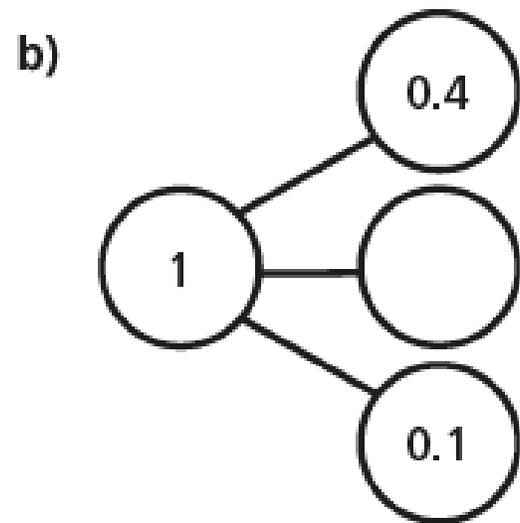
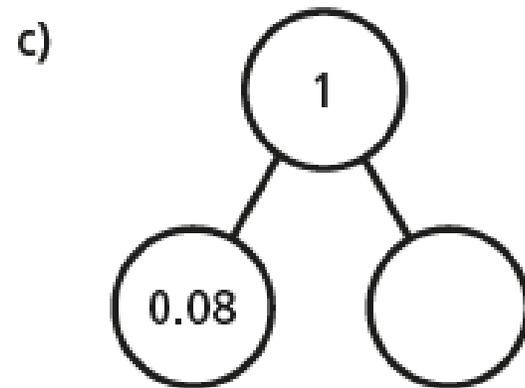
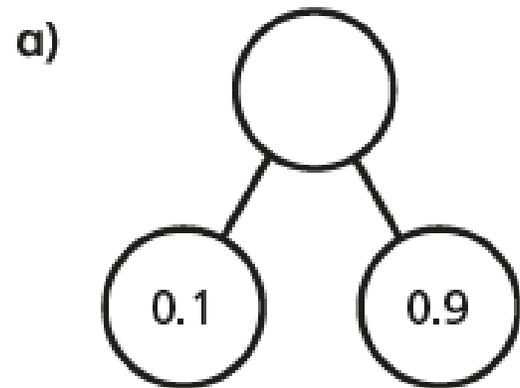
d) 32 hundredths =

e) 0.4 =  tenths

f) 50 hundredths =

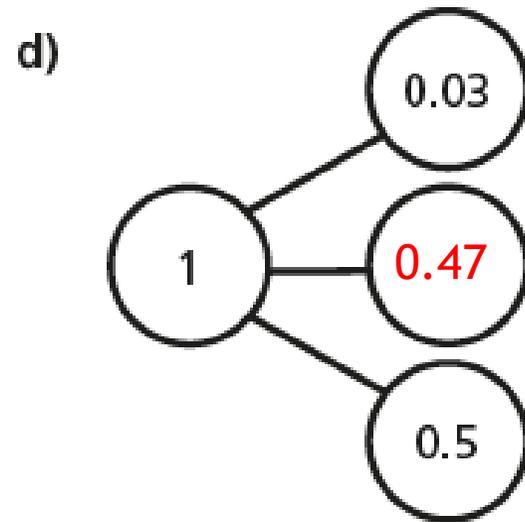
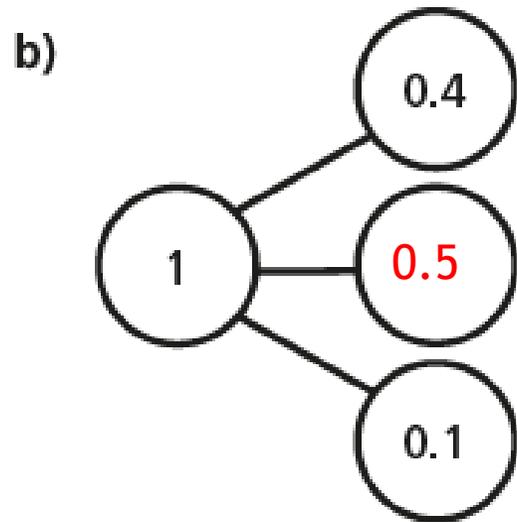
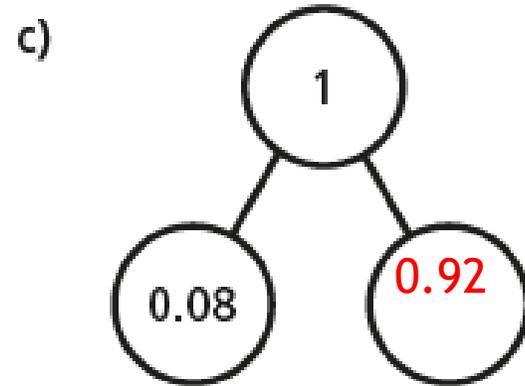
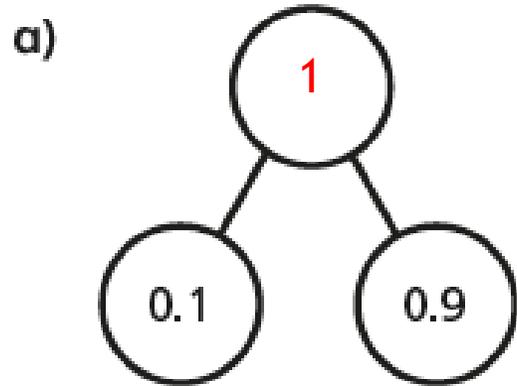
# THREE CHILLIES

Complete the part-whole models.



# THREE CHILLIES ANSWERS

Complete the part-whole models.



# DIVE DEEPER 1

Tick the calculations that do not sum to 1

$0.4 + 0.6$

$0.4 + 0.06$

$0.04 + 0.06$

$0.8 + 0.92$

$0.08 + 0.92$

$0.92 + 0.08$

How did you work this out?

Fill in the missing numbers.

a)  $0.1 + \square = 1$

d)  $0.15 + 0.64 + \square = 1$

b)  $\square + 0.01 = 1$

e)  $0.15 + \square + 0.65 = 1$

c)  $0.03 + \square = 1$

f)  $\square + 0.04 + 0.5 = 1$

# DIVE DEEPER 1 answers

Tick the calculations that do not sum to 1

$0.4 + 0.6$

$0.4 + 0.06$

$0.04 + 0.06$

$0.8 + 0.92$

$0.08 + 0.92$

$0.92 + 0.08$

How did you work this out?

You could use column addition to prove that these do not sum to 1.

Fill in the missing numbers.

a)  $0.1 + \boxed{0.9} = 1$

d)  $0.15 + 0.64 + \boxed{0.21} = 1$

b)  $\boxed{0.99} + 0.01 = 1$

e)  $0.15 + \boxed{0.20} + 0.65 = 1$

c)  $0.03 + \boxed{0.97} = 1$

f)  $\boxed{0.46} + 0.04 + 0.5 = 1$

# DIVE DEEPER 2

Here are eight number cards.



Use the number cards to make each calculation correct.

You can use each number once only.

$$\square + \square = 1$$

$$\square + \square + \square = 1$$

$$\square + \square + \square = 1$$

## DIVE DEEPER 2 answers

Here are eight number cards.

$\frac{6}{10}$	$\frac{19}{100}$	0.2	0.5	$\frac{8}{10}$	0.01	$\frac{30}{100}$	0.4
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Use the number cards to make each calculation correct.

You can use each number once only.

$$\frac{6}{10} + 0.4 = 1$$

$$\frac{8}{10} + \frac{19}{100} + 0.01 = 1$$

$$0.5 + 0.2 + \frac{30}{100} = 1$$

# Self assessment: how did you do?

- ▶ SOME WILL EVEN add a mix of fractions and decimals to make 1
- ▶ SOME will add a mix of decimals with 1dp and 2dp to make 1
- ▶ MOST will complete decimal part / whole models to make 1
- ▶ ALL will use a hundred square to find two decimal numbers that total 1