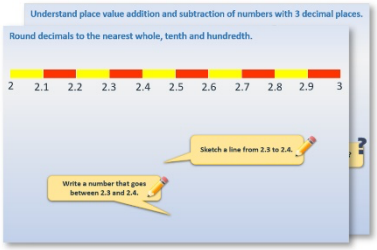
# Week 7, Day 5
# Fractions of amounts (2)

**Each day covers one maths topic. It should take you about 1 hour or just a little more.**

1. Start by reading through the **Learning Reminders**.
   They come from our *PowerPoint* slides.

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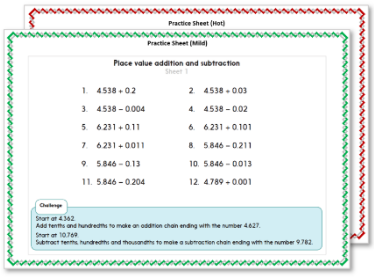
2. Tackle the questions on the **Practice Sheet**.
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.

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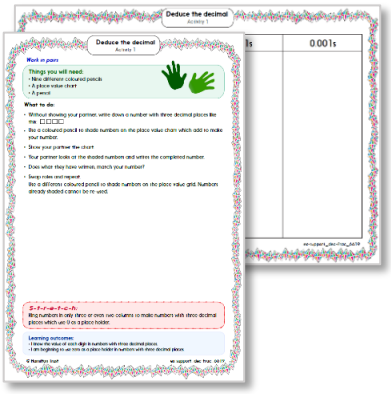
3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**

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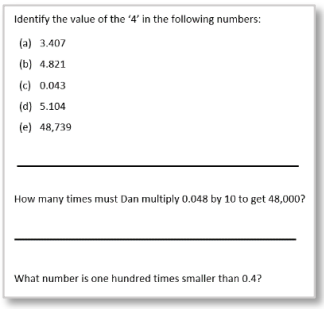
4. Have I mastered the topic? A few questions to **Check your understanding**.
   Fold the page to hide the answers!

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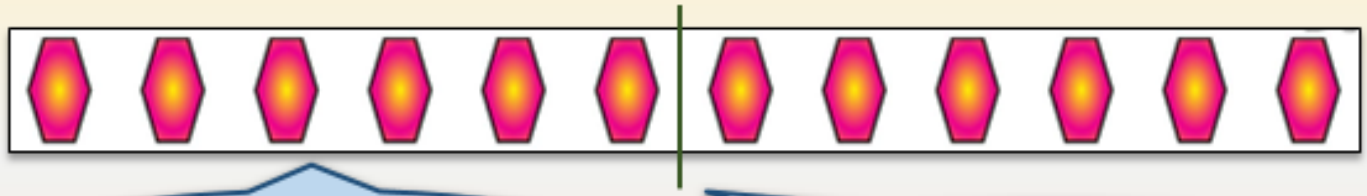
# Learning Reminders

## Find unit fractions of quantities and link to division facts.

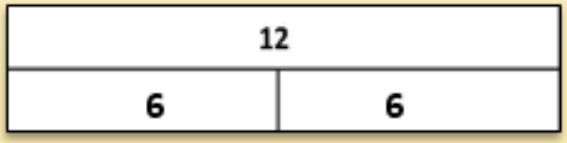


Imagine folding this strip of 12 shapes in **half...**

What is $^1/_2$ of 12?

We can also use a **bar model** to show half of 12.


To find $^1/_2$, **divide by 2.**

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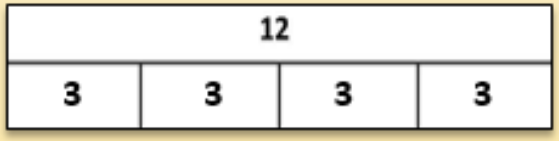
# Learning Reminders

## Find unit fractions of quantities and link to division facts.

Fold your strip in half and half again so that you have **4 equal parts.** What do we call each part?

What is $^1/_4$ of 12?


We can also use a **bar model** to show $^1/_4$ of 12.




To find $^1/_4$, divide by 4.

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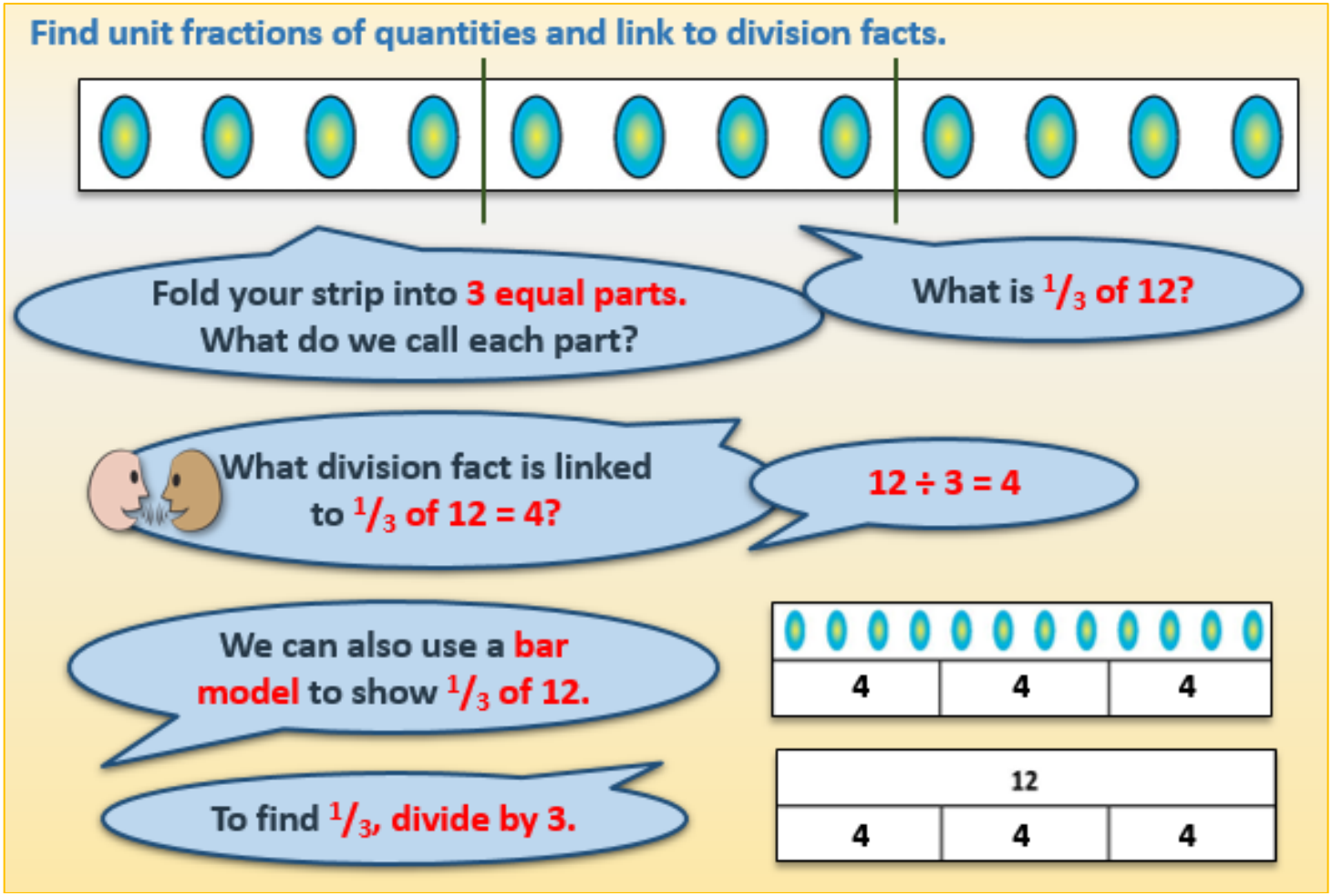
# Learning Reminders

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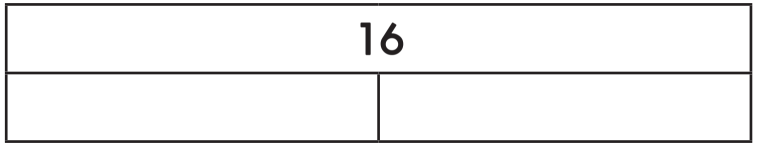
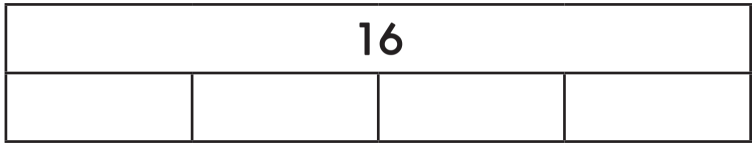
# Practice Sheet Mild

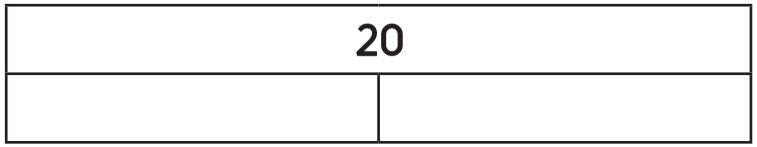
## Fractions practice



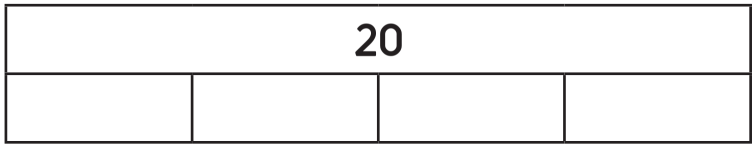

$\frac{1}{2}$ of 16 = ☐



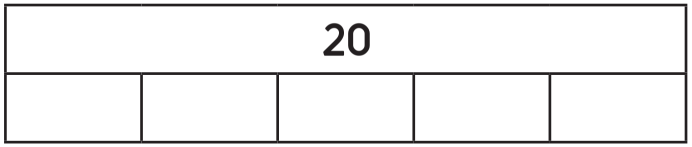

$\frac{1}{4}$ of 16 = ☐




$\frac{1}{2}$ of 20 = ☐




$\frac{1}{4}$ of 20 = ☐




$\frac{1}{5}$ of 20 = ☐

$\frac{1}{2}$ of 40 = ☐

$\frac{1}{4}$ of 40 = ☐

$\frac{1}{5}$ of 40 = ☐

$\frac{1}{5}$ of 35 = ☐

$\frac{1}{2}$ of 14 = ☐

$\frac{1}{4}$ of 28 = ☐

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# Practice Sheet Hot

## Fractions practice

$\frac{1}{2}$ of 16 = ☐

$\frac{1}{4}$ of 16 = ☐

$\frac{1}{8}$ of 16 = ☐

$\frac{1}{2}$ of 20 = ☐

$\frac{1}{4}$ of 20 = ☐

$\frac{1}{5}$ of 20 = ☐

$\frac{1}{10}$ of 20 = ☐

$\frac{1}{2}$ of 30 = ☐

$\frac{1}{3}$ of 30 = ☐

$\frac{1}{5}$ of 30 = ☐

$\frac{1}{10}$ of 30 = ☐

$\frac{1}{2}$ of 40 = ☐

$\frac{1}{4}$ of 40 = ☐

$\frac{1}{5}$ of 40 = ☐

$\frac{1}{8}$ of 40 = ☐

$\frac{1}{10}$ of 40 = ☐

**Challenge**

What different fractions can you find of 36?

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# Practice Sheet Answers

## Fractions practice (Mild)

$\frac{1}{2}$ of 16 = 8
$\frac{1}{4}$ of 16 = 4

$\frac{1}{2}$ of 40 = 20
$\frac{1}{4}$ of 40 = 10
$\frac{1}{5}$ of 40 = 8

$\frac{1}{2}$ of 20 = 10
$\frac{1}{4}$ of 20 = 5
$\frac{1}{5}$ of 20 = 4

$\frac{1}{5}$ of 35 = 7
$\frac{1}{2}$ of 14 = 7
$\frac{1}{4}$ of 28 = 7

## Fractions practice (Hot)

$\frac{1}{2}$ of 16 = 8
$\frac{1}{4}$ of 16 = 4
$\frac{1}{8}$ of 16 = 2

$\frac{1}{2}$ of 20 = 10
$\frac{1}{4}$ of 20 = 5
$\frac{1}{5}$ of 20 = 4
$\frac{1}{10}$ of 20 = 2

$\frac{1}{2}$ of 30 = 15
$\frac{1}{3}$ of 30 = 10
$\frac{1}{5}$ of 30 = 6
$\frac{1}{10}$ of 30 = 3

$\frac{1}{2}$ of 40 = 20
$\frac{1}{4}$ of 40 = 10
$\frac{1}{5}$ of 40 = 8
$\frac{1}{8}$ of 40 = 5
$\frac{1}{10}$ of 40 = 4

**Challenge**

What different fractions can you find of 36?

Children's answers could include:

$\frac{1}{2}$ of 36 = 18
$\frac{1}{4}$ of 36 = 9
$\frac{3}{4}$ of 36 = 27
$\frac{1}{3}$ of 36 = 12
$\frac{2}{3}$ of 36 = 24

$\frac{1}{6}$ of 36 = 6
$\frac{2}{6}$ of 36 = 12
$\frac{3}{6}$ of 36 = 18
$\frac{4}{6}$ of 36 = 24
$\frac{5}{6}$ of 36 = 30

$\frac{1}{9}$ of 36 = 4
$\frac{2}{9}$ of 36 = 8
$\frac{4}{9}$ of 36 = 16
$\frac{5}{9}$ of 36 = 20
$\frac{7}{9}$ of 36 = 28
$\frac{8}{9}$ of 36 = 32

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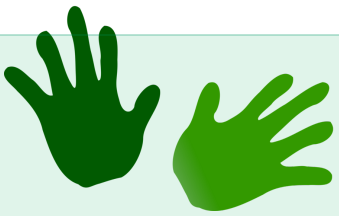
# A Bit Stuck?
## Alien adventure

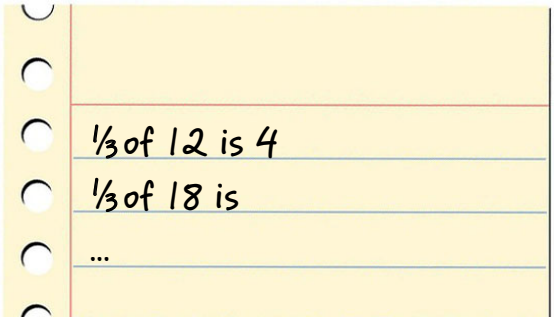
***Work in pairs***

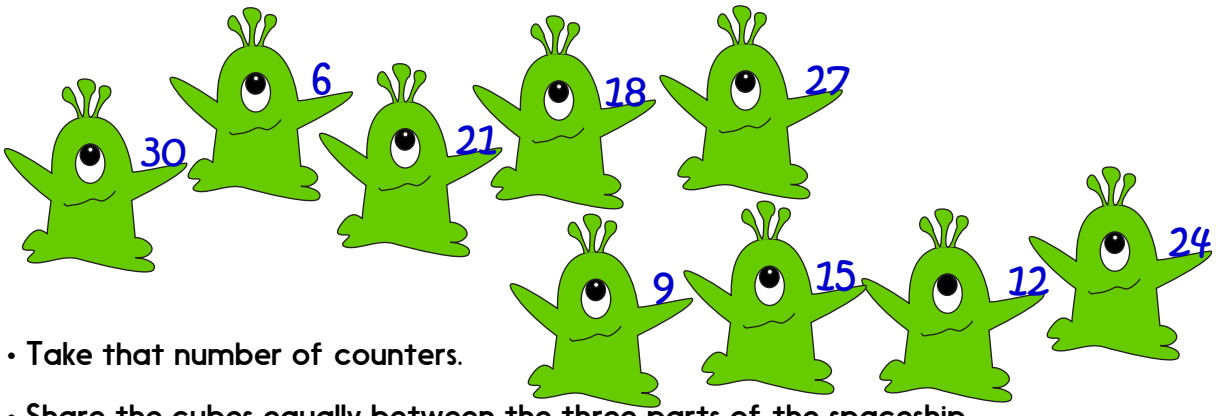
**Things you will need:**
- An outline of a spaceship
- 30 counters/pennies
- A pencil



**What to do:**

- The aliens are going on an adventure!
- Each ⅓ of the spaceship must have the same number of aliens. Otherwise the spaceship will become unstable.
- Choose an alien with a number.




- Take that number of counters.
- Share the cubes equally between the three parts of the spaceship.
- Write the fraction sentence.
- Choose at least four other aliens with numbers to go on an adventure. Each time, work out how many aliens need to be in each ⅓ of the spaceship.

***S-t-r-e-t-c-h:***

Find ⅓ of 12, ⅔ of 12 and ⅗ of 12.

Find ⅓, ⅔ and ⅗ of another number of aliens.

**Learning outcomes:**
- I can understand that thirds are equal parts of a whole.
- I can find ⅓ of numbers (whole number answers)
- I am beginning to find ⅔ of numbers (whole number answers).

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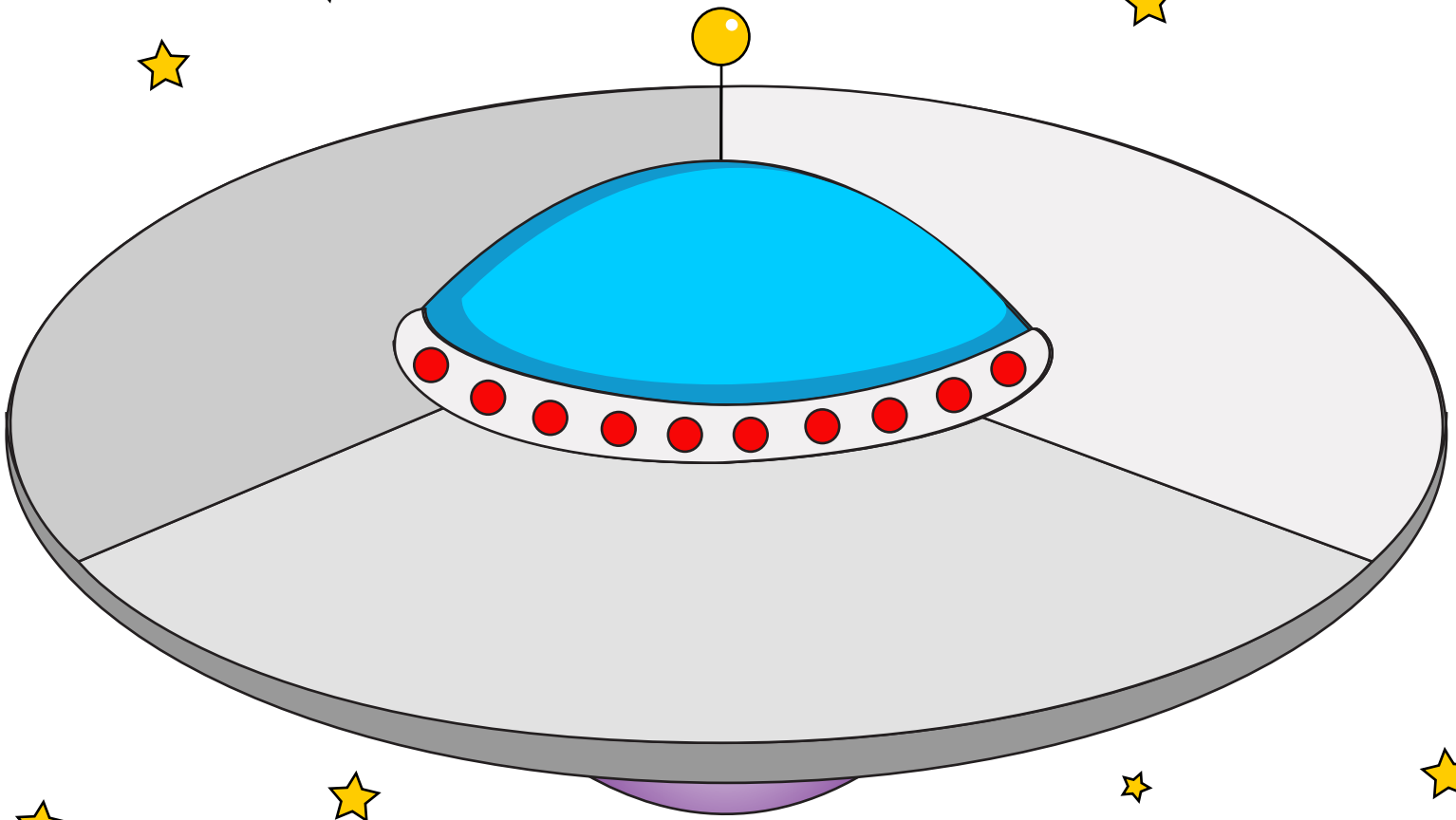
# A Bit Stuck?
## Alien adventure



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# Check your understanding:

## *Questions*

Complete each sentence:

$\frac{1}{3}$ of 15 = ☐

$\frac{1}{5}$ of 40 = ☐

$\frac{1}{6}$ of 24 = ☐

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Draw three bar models, one to represent each of these fraction problems.

$\frac{1}{3}$ of 24

$\frac{1}{8}$ of 24

$\frac{1}{5}$ of 30

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**Answers on next page**

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# Check your understanding:

***Answers***

Complete each sentence:

$\frac{1}{3}$ of 15 = 5

$\frac{1}{5}$ of 40 = 8

$\frac{1}{6}$ of 24 = 4

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Draw three bar models, one to represent each of these fraction problems. A common error is to write the denominator number rather than the fractional amount in the bar model cells.

$\frac{1}{3}$ of 24 = 8

| 24 | | |
|---|---|---|
| 8 | 8 | 8 |

$\frac{1}{8}$ of 24 = 3

| 24 | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

$\frac{1}{5}$ of 30 = 6

| 30 | | | | |
|---|---|---|---|---|
| 6 | 6 | 6 | 6 | 6 |

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