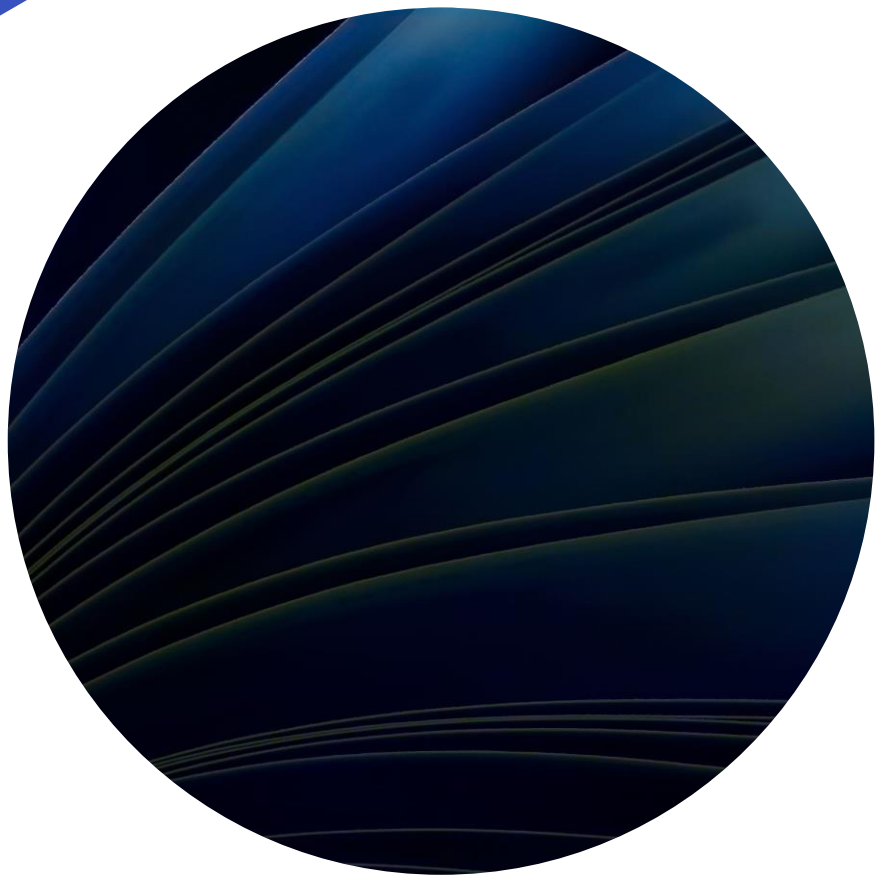
WEEK 5

FRACTIONS AND NUMBERS

Dear Class 10, parents and carers.

I hope that all answers in this PowerPoint are correct.

I apologise in advance for any mistakes I might have inadvertently made.



DAY 1

Finding halves and quarters of numbers.

- **Find half of these numbers.**

- **1. 26 Half of 20 is 10**
- **Half of 6 is 3**
- **10 + 3 =13**
- **2. 72 Half of 70 is 35**
- **Half of 2 is 1**
- **35 + 1 = 36**
- **3. 84**
- **4. 50**
- **5. 68**
- **6. 16**
- **7. 42**
- **8. 94**
- **9. 36**
- **10. 78**
- **11. 24**
- **12. 100**

- **Now try these.**

- **13. 7**
- **14. 25**
- **15. 61**
- **16. 39**
- **17. 130**
- **18. 148**
- **19. 522**
- **20. 1000**

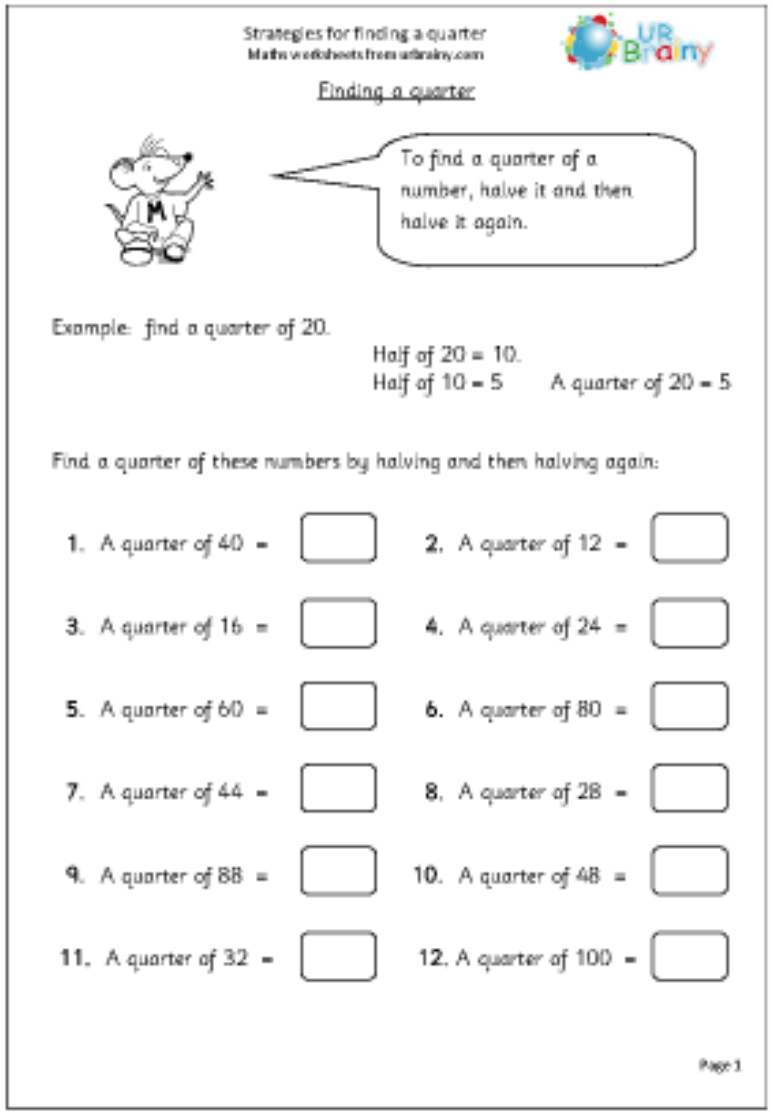
ANSWERS

- 1. 13
- 2. 36
- 3. 42
- 4. 25
- 5. 34
- 6.8
- 7. 21
- 8. 47
- 9. 18
- 10. 39
- 11. 12
- 12. 50
- 13. 3 ½
- 14. 12 ½
- 15. 30 ½
- 16. 19 ½
- 17. 65
- 18. 74
- 19. 261
- 20. 500

L.O. Can I find half of a number?

Try and make your own game.

L.O. Can I find a quarter of a number?



Strategies for finding a quarter

Finding a quarter

To find a quarter of a number, halve it and then halve it again.

Example: find a quarter of 20.

Half of 20 = 10.
Half of 10 = 5 A quarter of 20 = 5

Find a quarter of these numbers by halving and then halving again:

1. A quarter of 40 = ☐
2. A quarter of 12 = ☐
3. A quarter of 16 = ☐
4. A quarter of 24 = ☐
5. A quarter of 60 = ☐
6. A quarter of 80 = ☐
7. A quarter of 44 = ☐
8. A quarter of 28 = ☐
9. A quarter of 88 = ☐
10. A quarter of 48 = ☐
11. A quarter of 32 = ☐
12. A quarter of 100 = ☐

Page 1

ANSWERS

- 1. 10
- 2. 3
- 3. 4
- 4. 6
- 5. 15
- 6. 20
- 7. 11
- 8. 7
- 9. 22
- 10. 12
- 11. 8
- 12. 25

DAY 2

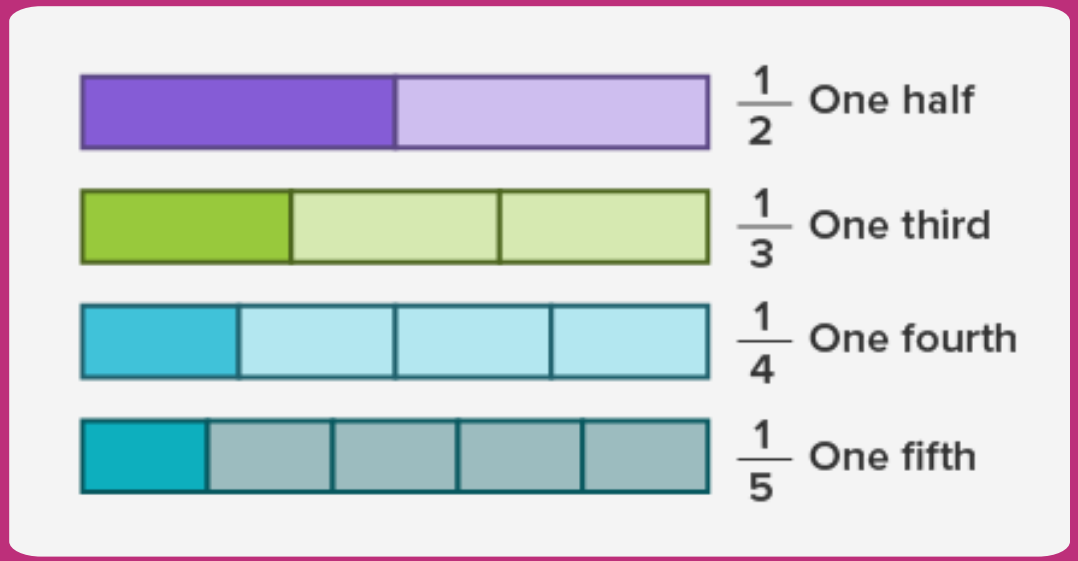
Fractions of amounts

unit fractions.

A unit fraction is when the numerator is 1.

These are examples of unit fractions.

Can you think of anymore?



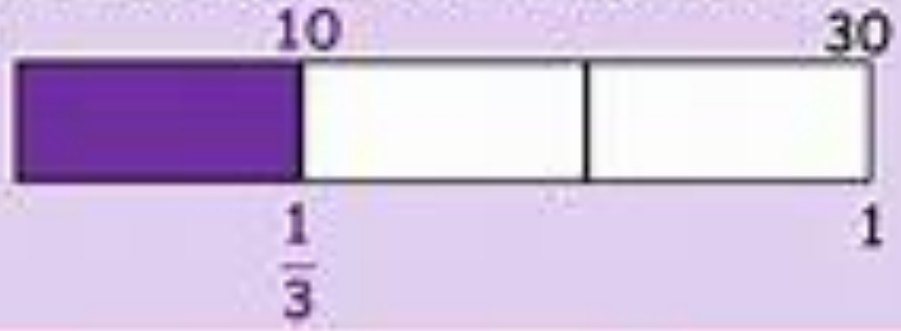
Finding fractions of amounts

The denominator tells us how many parts to divide into.

Finding $\frac{1}{3}$ of an amount is the same as dividing that amount by 3.

So $\frac{1}{3}$ of 30 = 10

30 ÷ 3 = 10



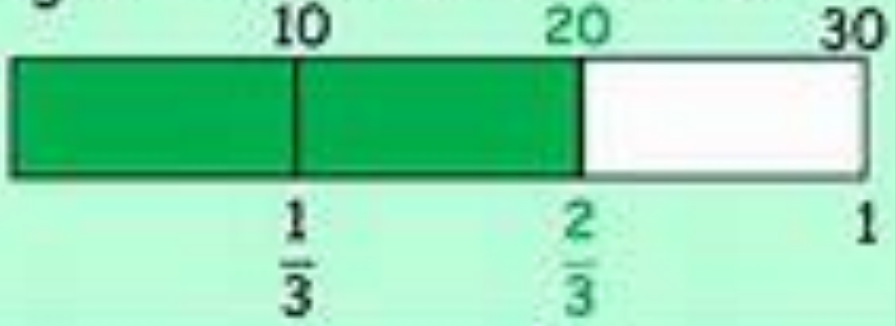
The numerator tells us how many parts we want.

If we're asked to find $\frac{2}{3}$ of an amount, we need 2 parts.

If $\frac{1}{3}$ of 30 = 10

Then $\frac{2}{3}$ of 30 = 20

10 × 2 = 20



L.O. Can I find the amounts of these unit fractions?

- 1. Find 1/3 of these numbers.
- A) 9
- B) 15
- C) 3
- D) 30
- E) 39
- 2. Find 1/10 of these numbers.
- A) 20
- B) 50
- C) 10
- D) 100
- E) 170

ANSWERS

1. A) 3

B) 5

C) 1

D) 10

E) 13

2.A) 2

B) 5

C) 1

D) 10

E) 17

Now try these.

$\frac{1}{5}$ of 10	$\frac{1}{2}$ of 90	3	35
$\frac{1}{5}$ of 50	$\frac{1}{3}$ of 30	4	16
$\frac{1}{3}$ of 12	$\frac{1}{3}$ of 48	5	8
$\frac{1}{10}$ of 30	$\frac{1}{4}$ of 32	2	9
$\frac{1}{4}$ of 20	$\frac{1}{4}$ of 44	10	45
$\frac{1}{2}$ of 36	$\frac{1}{4}$ of 100	6	1
$\frac{1}{3}$ of 27	$\frac{1}{2}$ of 70	15	10
$\frac{1}{4}$ of 60	$\frac{1}{4}$ of 200	12	5
$\frac{1}{10}$ of 60	$\frac{1}{5}$ of 5	13	4
$\frac{1}{2}$ of 74	$\frac{1}{10}$ of 40	9	11
$\frac{1}{3}$ of 36	$\frac{1}{3}$ of 33	18	50
$\frac{1}{5}$ of 65	$\frac{1}{5}$ of 25	14	25
$\frac{1}{4}$ of 56	$\frac{1}{4}$ of 36	37	11

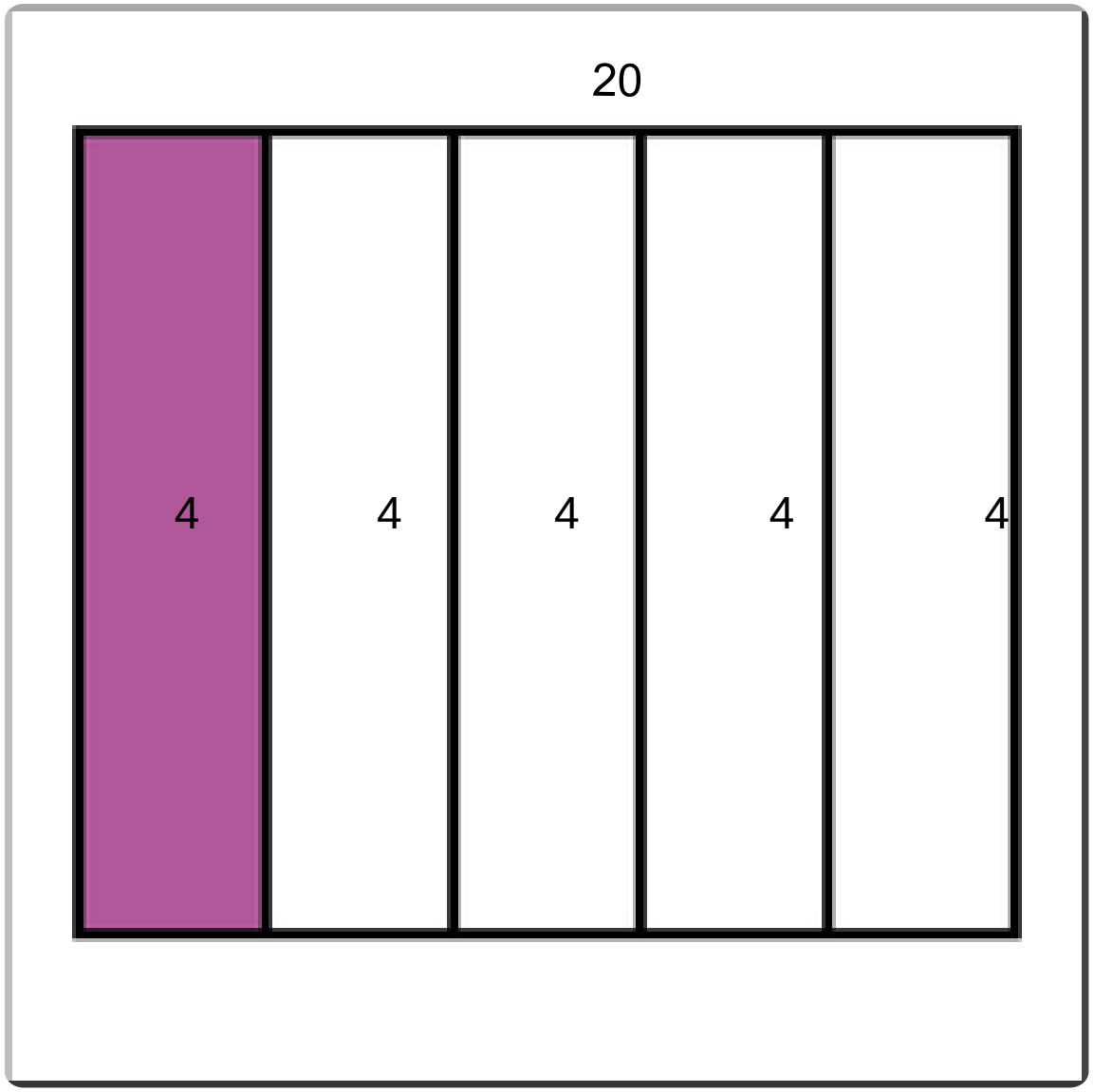
ANSWERS

- 1. 2
- 2. 10
- 3. 4
- 4. 3
- 5. 5
- 6. 18
- 7. 9
- 8. 15
- 9. 6
- 10. 37
- 11. 12
- 12. 13
- 13. 14

14. 45
15. 10
16. 16
17. 8
18. 11
19. 25
20. 35
21. 50
22. 1
23. 4
24. 11
25. 5
26. 9

DAY 3

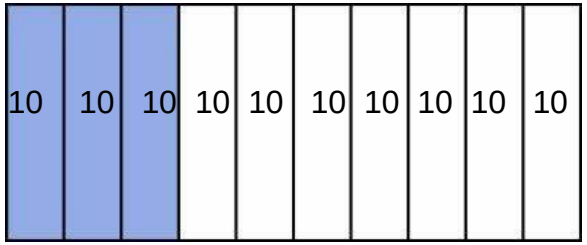
Fractions of amounts non-unit fractions



L.O. Can I use the bar method to solve these problems?

- 1/5 of 20 is 4
- 2/5 of 20 is
- 3/5 of 20 is
- 4/5 of 20 is
- 5/5 0f 20 is

100

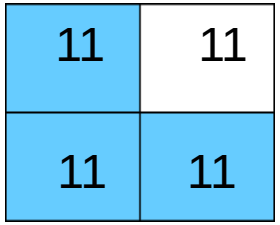


3/10 of 100 is

7/10 of 100 is

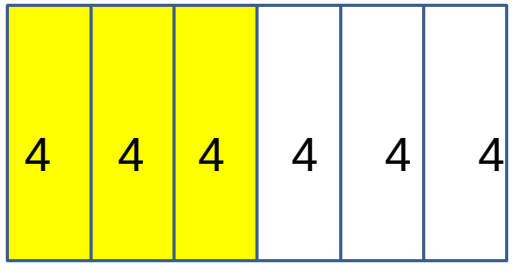
5/10 of 100 is

44



¾ of 44 is

24



3/6 of 24 is

1/6 of 24 is

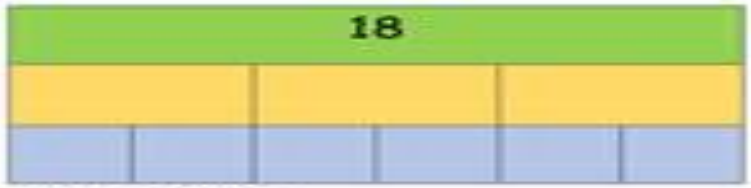
6/6 of 24 is

Can you show some of your own bar models?

Name: 9/2/17

Can I find fractions of amounts using the bar model?

Ch 1 – Do the first one in each box
Ch 2 – Do the first three in each box
Ch 3 – Do all questions.

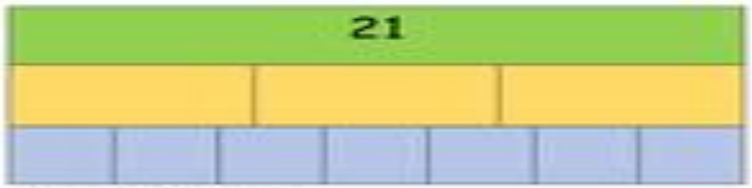


$\frac{1}{3}$ of 18 =

$\frac{1}{6}$ of 18 =

$\frac{2}{3}$ of 18 =

$\frac{5}{6}$ of 18 =

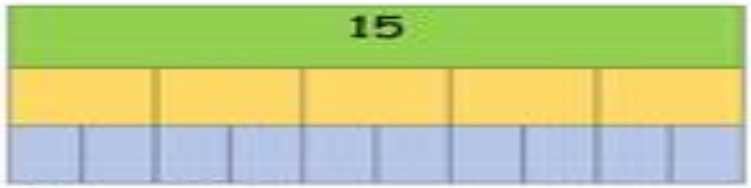


$\frac{1}{3}$ of 21 =

$\frac{1}{7}$ of 21 =

$\frac{2}{3}$ of 21 =

$\frac{4}{7}$ of 21 =

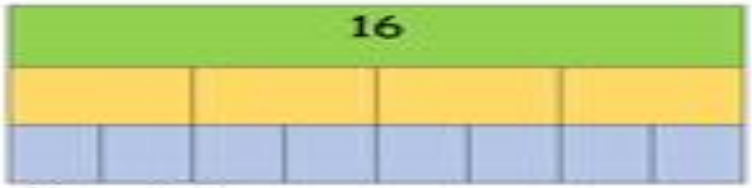


$\frac{1}{5}$ of 15 =

$\frac{1}{10}$ of 15 =

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

$\frac{7}{10}$ of 15 =



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

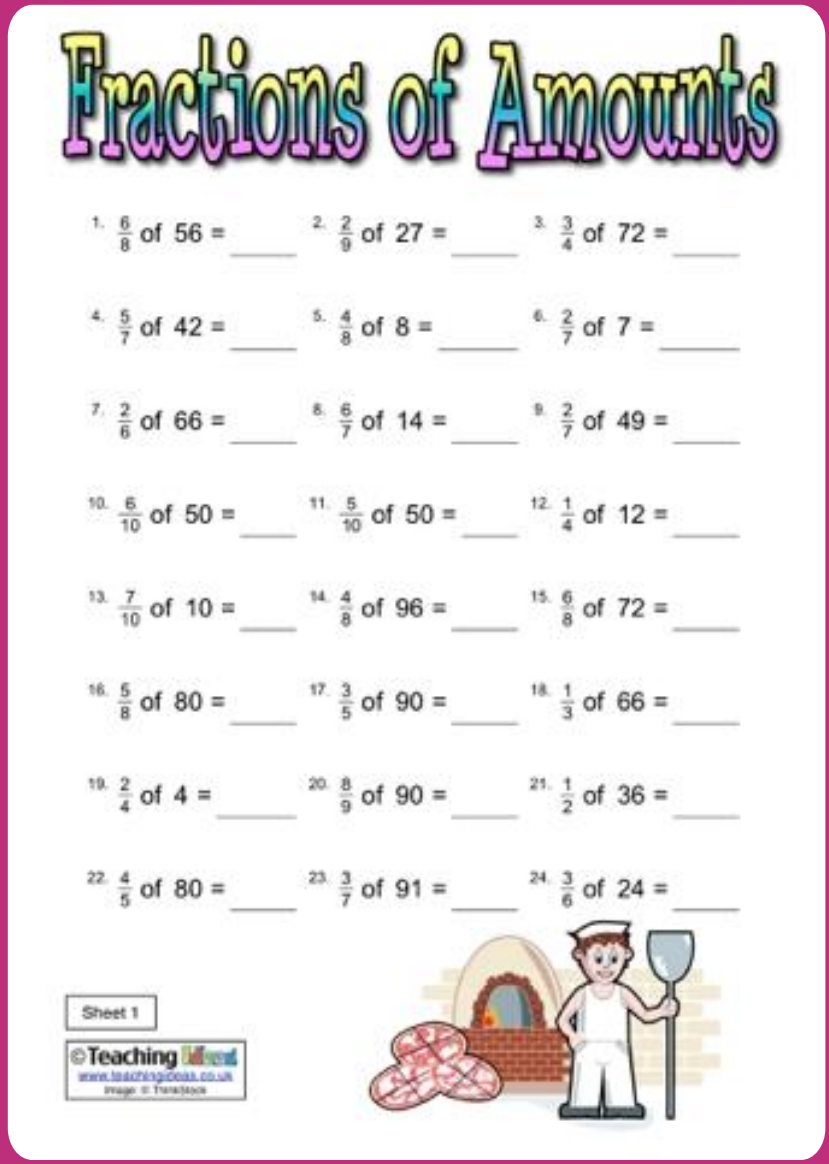
$\frac{1}{8}$ of 16 =

$\frac{3}{4}$ of 16 =

$\frac{7}{8}$ of 16 =

L.O. Can I solve Fractions of Amounts?

HAVE A GO
THEY ARE
QUITE TRICKY



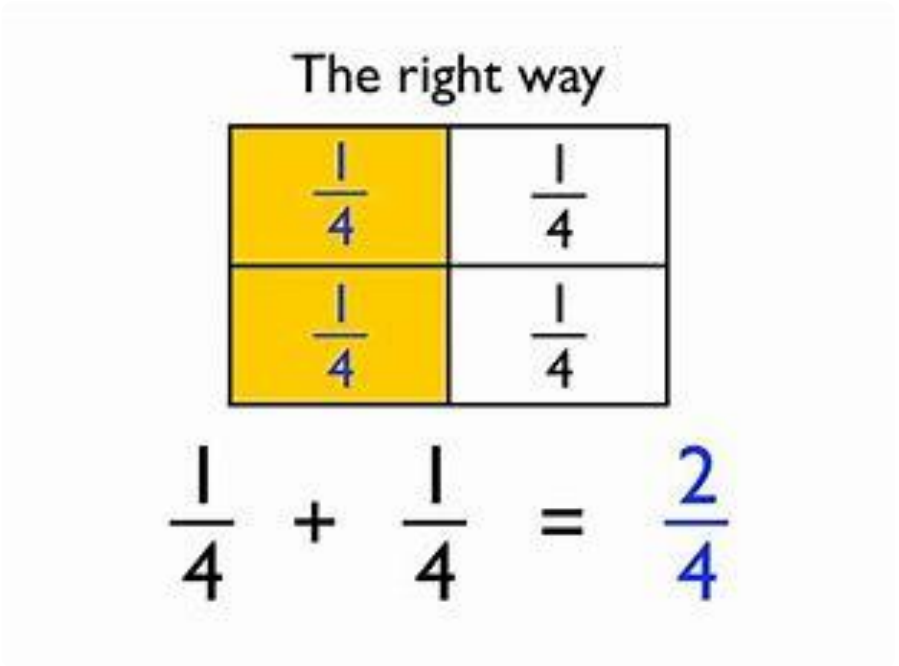
ANSWERS

	1. 42	2. 6	3. 54	4. 30
	5. 4	6. 2	7. 22	8. 12
	9. 14	10. 30	11. 25	12. 3
	13. 7	14. 48	15. 48	16. 50
	17. 54	18. 22	19. 2	20. 80
	21. 18	22. 64	23. 39	24. 12

DAY 4

Adding fractions

L.O. Can I add fractions with the same denominator?



FRACTIONS

Adding fractions with like denominators

All fractions have the same denominator. Add the two numerators up and keep the denominator the same.

$\frac{1}{5} + \frac{2}{5} =$

$\frac{2}{5} + \frac{2}{5} =$

$\frac{1}{8} + \frac{6}{8} =$

$\frac{4}{6} + \frac{1}{6} =$

$\frac{4}{8} + \frac{3}{8} =$

$\frac{2}{4} + \frac{1}{4} =$

$\frac{3}{7} + \frac{3}{7} =$

$\frac{3}{6} + \frac{2}{6} =$

$\frac{3}{10} + \frac{4}{10} =$

$\frac{1}{7} + \frac{1}{7} =$

$\frac{7}{9} + \frac{1}{9} =$

$\frac{1}{12} + \frac{4}{12} =$

$\frac{1}{5} + \frac{3}{5} =$

$\frac{4}{12} + \frac{3}{12} =$

$\frac{2}{3} + \text{—} = \frac{5}{3}$

$\frac{1}{1} + \text{—} = \frac{6}{1}$

$\frac{1}{8} + \text{—} = \frac{6}{8}$

$\text{—} + \frac{1}{9} = \frac{2}{9}$

$\text{—} + \frac{5}{2} = \frac{10}{2}$

$\frac{7}{10} + \frac{1}{\text{—}} = \frac{8}{10}$

$\frac{5}{\text{—}} + \frac{5}{2} = \frac{10}{2}$

ANSWERS

- 3/5
- 4/5
- 7/8
- 5/6
- 7/8
- ¾

5/6
7/10
2/3
8/9
5/12
4/5

- 6/7

7/12

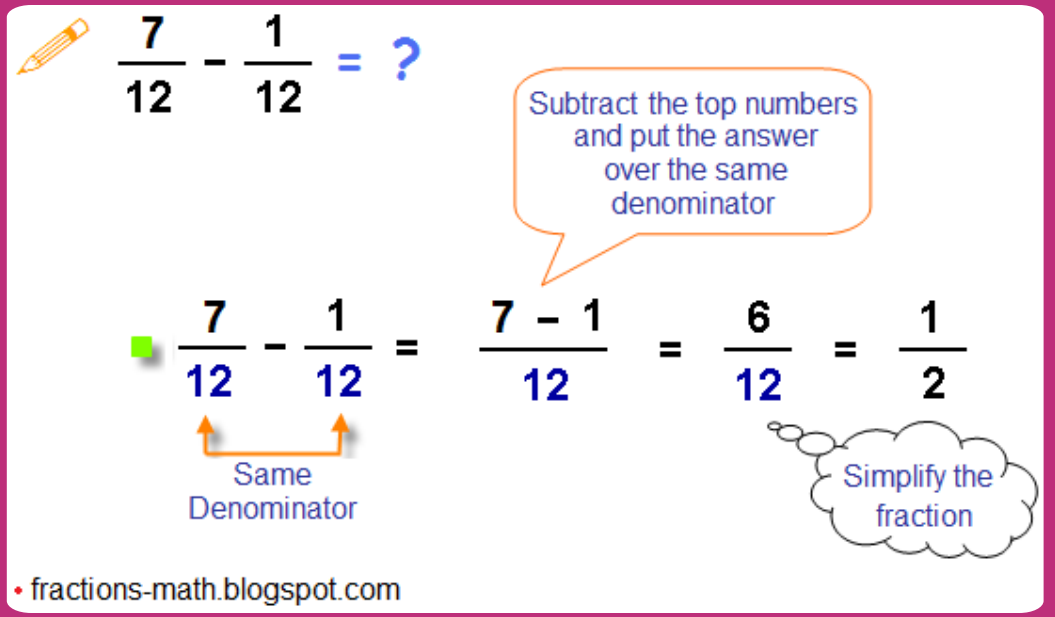
2/1
5/8
1/9
5/2
1/10

5/2

DAY 5

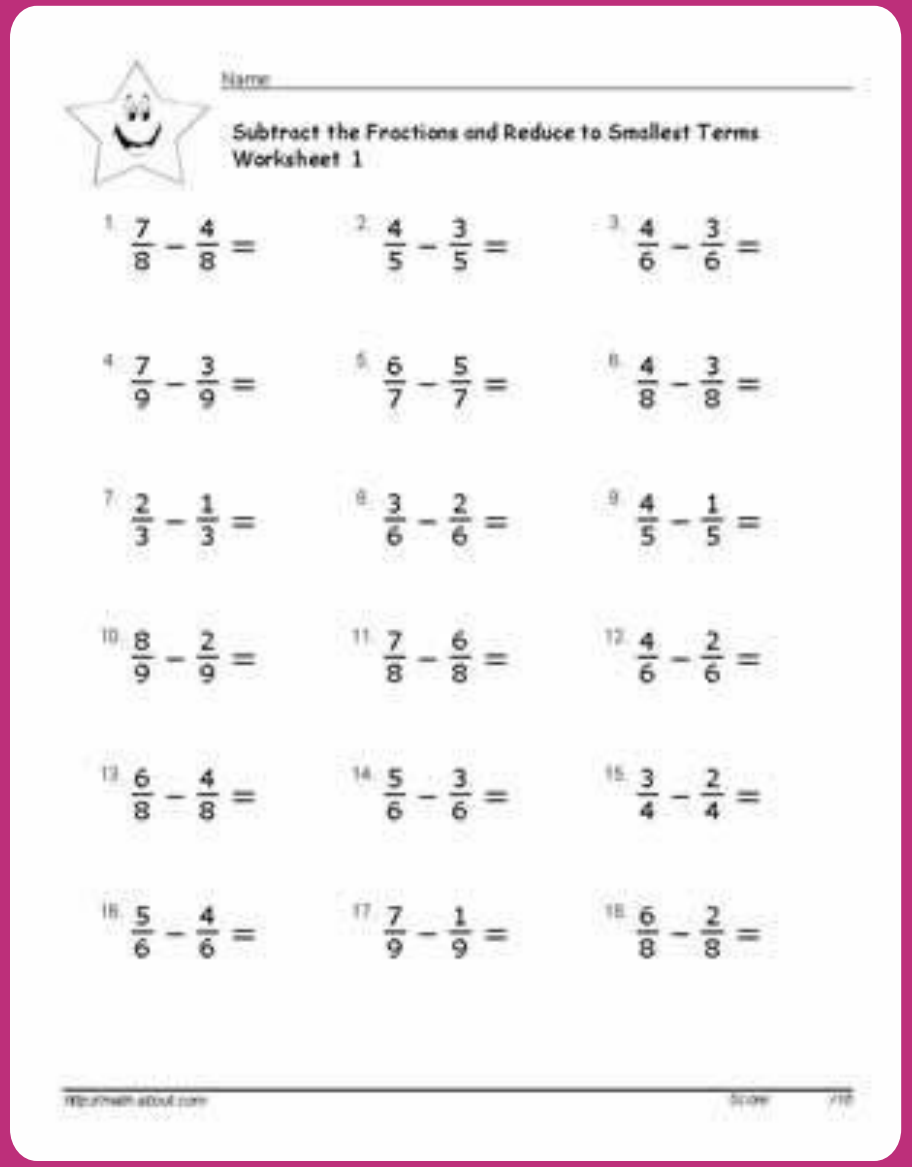
Subtracting fractions

L.O. Can I subtract fractions with the same denominator?



REMEMBER

The denominator stays the same.



Name _____

Subtract the Fractions and Reduce to Smallest Terms
Worksheet 1

1. $\frac{7}{8} - \frac{4}{8} =$
2. $\frac{4}{5} - \frac{3}{5} =$
3. $\frac{4}{6} - \frac{3}{6} =$
4. $\frac{7}{9} - \frac{3}{9} =$
5. $\frac{6}{7} - \frac{5}{7} =$
6. $\frac{4}{8} - \frac{3}{8} =$
7. $\frac{2}{3} - \frac{1}{3} =$
8. $\frac{3}{6} - \frac{2}{6} =$
9. $\frac{4}{5} - \frac{1}{5} =$
10. $\frac{8}{9} - \frac{2}{9} =$
11. $\frac{7}{8} - \frac{6}{8} =$
12. $\frac{4}{6} - \frac{2}{6} =$
13. $\frac{6}{8} - \frac{4}{8} =$
14. $\frac{5}{6} - \frac{3}{6} =$
15. $\frac{3}{4} - \frac{2}{4} =$
16. $\frac{5}{6} - \frac{4}{6} =$
17. $\frac{7}{9} - \frac{1}{9} =$
18. $\frac{6}{8} - \frac{2}{8} =$

ANSWERS

- 1. 3/8
- 4. 4/9
- 7. 1/3
- 10. 6/9
- 13. 2/8
- 16. 1/6

2. 1/5
5. 1/7
8. 1/6
11. 1/8
14. 2/6
17. 6/9

3. 1/6
6. 1/8
9. 3/5
12. 2/6
15. ¼
18.4/8

L.O. Can I solve fraction word problems?

A book has 8 chapters of equal length. Mary has read 4 chapters. What fraction of the book does Mary have left to read?

I

Jack needs to walk $\frac{7}{10}$ kilometer to school. He has already walked $\frac{3}{10}$ kilometer. How much farther does Jack need to walk?

J

Sarah had $\frac{6}{8}$ of a packet of cookies. After she ate some cookies $\frac{2}{8}$ of a packet remained. What fraction of the packet of cookies did Sarah eat?

K

Dad cut an apple pie into 8 slices. He served 4 slices to his children and 2 slices to his wife. What fractional part of the apple pie did dad serve?

L

ANSWERS

1. ½

2. 4/10

3. 4/8 OR ½

4. 6/8 OR ¾