AC
EA
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Birthday Cakes - Homework

I am learning to use multiplication to find a whole set when we know the size of a part of it.

Remember, we solve problems like this by thinking about dividing and multiplying.
e.g. $\frac{2}{9}$ of ☐ = 12 12 ÷ 2 = 6, and 6 x 9 = 54. So ☐ = 54

Warm up - Fill the boxes with the correct answers:

1)	$\frac{1}{2}$ of __ = 10		(5)	$\frac{1}{7}$ of __ = 4		(9)	$\frac{1}{12}$ of __ = 4	
2)	$\frac{1}{3}$ of __ = 7		(6)	$\frac{1}{8}$ of __ = 3		(10)	$\frac{1}{15}$ of __ = 3	
3)	$\frac{1}{4}$ of __ = 6		(7)	$\frac{1}{9}$ of __ = 2		(11)	$\frac{1}{18}$ of __ = 4	
4)	$\frac{1}{5}$ of __ = 5		(8)	$\frac{1}{10}$ of __ = 5		(12)	$\frac{1}{20}$ of __ = 7	

Step up:

1)	$\frac{2}{3}$ of __ = 10		(5)	$\frac{3}{7}$ of __ = 15		(9)	$\frac{5}{8}$ of __ = 35	
2)	$\frac{3}{5}$ of __ = 12		(6)	$\frac{3}{4}$ of __ = 18		(10)	$\frac{7}{8}$ of __ = 56	
3)	$\frac{4}{5}$ of __ = 20		(7)	$\frac{2}{9}$ of __ = 8		(11)	$\frac{11}{12}$ of __ = 33	
4)	$\frac{2}{7}$ of __ = 6		(8)	$\frac{4}{9}$ of __ = 20		(12)	$\frac{13}{15}$ of __ = 39	

What about some larger numbers?

1)	$\frac{2}{3}$ of __ = 40		(5)	$\frac{3}{7}$ of __ = 27		(9)	$\frac{5}{8}$ of __ = 35	
2)	$\frac{3}{5}$ of __ = 48		(6)	$\frac{3}{4}$ of __ = 33		(10)	$\frac{7}{8}$ of __ = 91	
3)	$\frac{4}{5}$ of __ = 28		(7)	$\frac{2}{9}$ of __ = 32		(11)	$\frac{11}{12}$ of __ = 77	
4)	$\frac{2}{7}$ of __ = 24		(8)	$\frac{4}{9}$ of __ = 56		(12)	$\frac{13}{15}$ of __ = 65	

Finale – Write a mathematical sentence and solve these problems:

1) Eric and Nicole have received equal shares of a quiz prize. They each received $26.50. How much was the total prize?
2) Anton, Hamish and James each sent an equal number of emails. If Anton and Hamish together sent 24, how many were sent all together?
3) Kirsten has been training for a marathon. When she has completed $\frac{3}{4}$ of her daily run, she has completed 33km. How far is her total training run?
4) Three of the five children in the Miller family have received a total of 54 marks in a Maths test. If all five children receive the same mark, what is the total number of marks achieved?
5) Make up two word problems of your own, and write down the question and the answer.

Birthday Cakes – Homework Sheet Answers

Warm up - Fill the boxes with the correct answers:

1)	$\frac{1}{2}$ of __ = 10	**20**	(5)	$\frac{1}{7}$ of __ = 4	**28**	(9)	$\frac{1}{12}$ of __ = 4	**48**
2)	$\frac{1}{3}$ of __ = 7	**21**	(6)	$\frac{1}{8}$ of __ = 3	**24**	(10)	$\frac{1}{15}$ of __ = 3	**45**
3)	$\frac{1}{4}$ of __ = 6	**24**	(7)	$\frac{1}{9}$ of __ = 2	**18**	(11)	$\frac{1}{18}$ of __ = 4	**72**
4)	$\frac{1}{5}$ of __ = 5	**25**	(8)	$\frac{1}{10}$ of __ = 5	**50**	(12)	$\frac{1}{20}$ of __ = 7	**140**

Step up:

1)	$\frac{2}{3}$ of __ = 10	**15**	(5)	$\frac{3}{7}$ of __ = 15	**35**	(9)	$\frac{5}{8}$ of __ = 35	**56**
2)	$\frac{3}{5}$ of __ = 12	**20**	(6)	$\frac{3}{4}$ of __ = 18	**24**	(10)	$\frac{7}{8}$ of __ = 56	**64**
3)	$\frac{4}{5}$ of __ = 20	**25**	(7)	$\frac{2}{9}$ of __ = 8	**36**	(11)	$\frac{11}{12}$ of __ = 33	**36**
4)	$\frac{2}{7}$ of __ = 6	**21**	(8)	$\frac{4}{9}$ of __ = 20	**45**	(12)	$\frac{13}{15}$ of __ = 39	**45**

What about some larger numbers?

1)	$\frac{2}{3}$ of __ = 40	**60**	(5)	$\frac{3}{7}$ of __ = 27	**63**	(9)	$\frac{5}{8}$ of __ = 35	**56**
2)	$\frac{3}{5}$ of __ = 48	**80**	(6)	$\frac{3}{4}$ of __ = 33	**44**	(10)	$\frac{7}{8}$ of __ = 91	**104**
3)	$\frac{4}{5}$ of __ = 28	**35**	(7)	$\frac{2}{9}$ of __ = 32	**144**	(11)	$\frac{11}{12}$ of __ = 77	**84**
4)	$\frac{2}{7}$ of __ = 24	**84**	(8)	$\frac{4}{9}$ of __ = 56	**126**	(12)	$\frac{13}{15}$ of __ = 65	**75**

Finale – Write a mathematical sentence and solve these problems:

6) Eric and Nicole have received equal shares of a quiz prize. They each received $26.50. How much was the total prize? **$53**

7) Anton, Hamish and James each sent an equal number of emails. If Anton and Hamish together sent 24, how many were sent all together? **36**

8) Kirsten has been training for a marathon. When she has completed $\frac{3}{4}$ of her daily run, she has completed 33km. How far is her total training run? **44km**

9) Three of the five children in the Miller family have received a total of 54 marks in a Maths test. If all five children receive the same mark, what is the total number of marks achieved? **90**

10) Make up two word problems of your own, and write down the question and the answer.