FRACTIONS

MTH 4-07b

I can solve problems involving fractions and mixed numbers in context, using addition, subtraction or multiplication.

Pupils should be able to:

- Calculate a fraction of a quantity
- Understand and use equivalence of fractions
- Understand that a fraction represents a division operation eg $\frac{3}{5}$ means $3 \div 5$
- Add, subtract and multiply fractions including mixed fractions.
- (Divide by a fraction, preferably in a context.)
- Apply to problems in a variety of contexts, including pie-charts.

PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

	DEVELOPING	CONSOLIDATING	SECURE
Calculate a fraction of a			
quantity. (Question 1)			
Understand equivalence of			
fractions. (Questions 2 & 3			
Add, subtract, multiply			
(and as extension divide			
fractions)			
(Question 4 - 6)			
Apply to problems			
(Questions 7 - 9)			

mymaths lessons: library/number/fractions/any lesson in this section

1. Calculate:-

a)
$$\frac{3}{5}$$
 of 60

b)
$$\frac{7}{9}$$
 of 63

c)
$$\frac{4}{5}$$
 of 45

2. Which pairs of fractions are equivalent:-

a)
$$\frac{4}{5}$$
 , $\frac{2}{3}$

b)
$$\frac{9}{12}$$
 , $\frac{3}{4}$ c) $\frac{2}{5}$, $\frac{3}{6}$

c)
$$\frac{2}{5}$$
 , $\frac{3}{6}$

3. Shannon has $\frac{1}{2}$ of a pizza and Clare has $\frac{3}{6}$ of the pizza. Do they eat the same amount?

4. Calculate:

a)
$$\frac{6}{7} + \frac{2}{3}$$

b)
$$3\frac{4}{5} + 2\frac{1}{2}$$

c)
$$\frac{6}{7} - \frac{4}{7}$$

a)
$$\frac{6}{7} + \frac{2}{3}$$
 b) $3\frac{4}{5} + 2\frac{1}{2}$ c) $\frac{6}{7} - \frac{4}{7}$ d) $6\frac{7}{8} - 4\frac{3}{4}$ e) $3\frac{4}{5} - \frac{2}{3}$

e)
$$3\frac{4}{5} - \frac{2}{3}$$

5. Multiply the following fractions:-

a)
$$\frac{3}{7} \times \frac{4}{9}$$

b)
$$\frac{3}{9} \times \frac{4}{5}$$

a)
$$\frac{3}{7} \times \frac{4}{9}$$
 b) $\frac{3}{9} \times \frac{4}{5}$ c) $10\frac{1}{2} \times \frac{6}{7}$ e) $1\frac{1}{3} \times 7\frac{2}{5}$

e)
$$1\frac{1}{3} \times 7\frac{2}{5}$$

6. Divide the following fractions:-

a)
$$\frac{2}{3} \div \frac{1}{4}$$

b)
$$\frac{3}{5} \div \frac{2}{3}$$

a)
$$\frac{2}{3} \div \frac{1}{4}$$
 b) $\frac{3}{5} \div \frac{2}{3}$ c) $4\frac{1}{2} \div 5\frac{1}{4}$ d) $8 \div 2\frac{2}{3}$

d) 8 ÷
$$2\frac{2}{3}$$

7) A piece of card measures $1\frac{5}{8}$ inches wide by $6\frac{1}{3}$ inches long. Calculate its area.

8) A fruit shop owner had $6\frac{2}{3}$ kg of strawberries. He sold $3\frac{4}{5}$ kg to one customer. What weight of strawberries were left?

9) From a 6metre length of ribbon Sally used $4\frac{3}{8}$ of this to wrap a present. How much did she have left?