Learning
<b>Objective:</b>

To be able to add & subtract mixed numbers

N	a	n	16	):

Date:

# **Do NOW Activity:**

- **1** Work out 0.25 × 1000
- **2** Solve 4x = x + 9
- 3 What is 10% of £5.50?
- 4 Work out 15.3 3.84
- 5 Work out 3 + -4

#### PRIOR KNOWLEDGE CHECK:

1. I am able to add and subtract fractions

# THE MAIN EVENT

## **WORKED EXAMPLE #1:**

1. Write  $\frac{5}{2}$  as a mixed number.

$$5 \div 2 = 2$$
 rmd 1 out of 2



2. Write  $\frac{21}{5}$  as a mixed number.

$$21 \div 5 = 4$$

rmd 1 out of 5



(1)

#### **PRACTICE #1:**

Question 1: Change these improper fractions into mixed numbers

- (a)  $\frac{7}{3}$
- (b)  $\frac{7}{5}$
- (c)  $\frac{5}{2}$
- (d)  $\frac{8}{7}$
- (e)  $\frac{5}{3}$

- (f)  $\frac{10}{3}$
- (g)  $\frac{23}{2}$
- (h)  $\frac{11}{4}$
- (i)  $\frac{11}{8}$
- (j)  $\frac{9}{4}$

- (k)  $\frac{13}{10}$
- (1)  $\frac{13}{6}$
- (m)  $\frac{16}{7}$
- (n)  $\frac{51}{10}$
- (o)  $\frac{34}{11}$

- (p)  $\frac{29}{12}$
- (q)  $\frac{60}{11}$
- (r)  $\frac{47}{15}$
- (s)  $\frac{101}{9}$
- (t)  $\frac{99}{20}$

## **WORKED EXAMPLE #2:**

1. Write  $1\frac{2}{3}$  as a top heavy fraction.

$$\frac{(1\times3)+2}{3}$$



2. Write  $5\frac{3}{3}$  as a top heavy fraction.

$$\frac{(5\times 5)+3}{5}$$

### PRACTICE #2:

Question 2: Change these mixed numbers into improper fractions

(a) 
$$2\frac{1}{5}$$

(b) 
$$3\frac{1}{2}$$

(c) 
$$1\frac{3}{4}$$

(d) 
$$3\frac{2}{3}$$

(a) 
$$2\frac{1}{5}$$
 (b)  $3\frac{1}{2}$  (c)  $1\frac{3}{4}$  (d)  $3\frac{2}{3}$  (e)  $1\frac{2}{5}$ 

(f) 
$$2\frac{4}{7}$$

(g) 
$$1\frac{1}{3}$$

(h) 
$$2\frac{3}{10}$$

(i) 
$$4\frac{3}{4}$$

(g) 
$$1\frac{1}{3}$$
 (h)  $2\frac{3}{10}$  (i)  $4\frac{3}{4}$  (j)  $1\frac{7}{12}$ 

(k) 
$$3\frac{9}{10}$$
 (l)  $2\frac{3}{50}$  (m)  $3\frac{5}{8}$  (n)  $8\frac{3}{8}$  (o)  $1\frac{14}{32}$ 

(1) 
$$2\frac{3}{50}$$

(m) 
$$3\frac{5}{8}$$

(n) 
$$8\frac{3}{8}$$

(o) 
$$1\frac{14}{32}$$

(p) 
$$2\frac{19}{24}$$

(p) 
$$2\frac{19}{24}$$
 (q)  $12\frac{1}{9}$ 

(r) 
$$5\frac{4}{15}$$
 (s)  $4\frac{11}{12}$  (t)  $13\frac{7}{16}$ 

(s) 
$$4\frac{11}{12}$$

(t) 
$$13\frac{7}{16}$$

## **APPLICATION:**

Question 1: Match up the improper fractions and mixed numbers.

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

$$2\frac{1}{3}$$

$$1\frac{3}{4}$$

$$3\frac{2}{3}$$

$$\frac{7}{4}$$

$$\frac{11}{3}$$

$$\frac{7}{3}$$

$$\frac{9}{4}$$

Question 2: Arrange these improper fractions in order, starting with the smallest.

$$\frac{23}{4}$$
,  $\frac{37}{7}$ ,  $\frac{11}{2}$ 

Question 3: Write down a mixed number between  $3\frac{3}{11}$  and  $3\frac{2}{5}$ 

Question 4: Gregory feeds his cat  $\frac{2}{5}$  of a can of cat food each day.

Work out how many cans of cat food are eaten each fortnight.

Give your answer as a mixed number.

