| **Learning Objective:** | To be able to convert between mixed numbers & improper fractions | **Name:** | |
| --- | --- | --- | --- |
| | | **Date:** | |

## Do NOW Activity:

1  Express 120 as a **product of primes**

2  Find the **nth term** of 2, 5, 10, 17

3  Work out 20 - 12 ÷ (8 - 2)

4  Work out 12.5 × 1.5

5  Work out  1485 ÷ 15

PRIOR KNOWLEDGE CHECK:
1. I am able to add and subtract fractions

## THE MAIN EVENT

### WORKED EXAMPLE #1:

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

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

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

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

$21 \div 5 = 4$
rmd 1 out of 5

$4\frac{1}{5}$ (1)

### PRACTICE #1:

Question 1:   Change these improper fractions into mixed numbers

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

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

(k) $\dfrac{13}{10}$  (l) $\dfrac{13}{6}$  (m) $\dfrac{16}{7}$  (n) $\dfrac{51}{10}$  (o) $\dfrac{34}{11}$

### WORKED EXAMPLE #2:

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

$\dfrac{(1 \times 3) + 2}{3}$

$\dfrac{5}{3}$ (1)

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

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

$\dfrac{28}{5}$ (1)

**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)  $3\frac{2}{3}$

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

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

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

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

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

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

**PRACTICE #3:**

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.

Question 5:     13     9     21     5     2

Using the cards, create an improper fraction that is:

(a) between 1 and 2          (b) between 2 and 3
(c) between 4 and 5          (d) between 5 and 10
(e) greater than 10