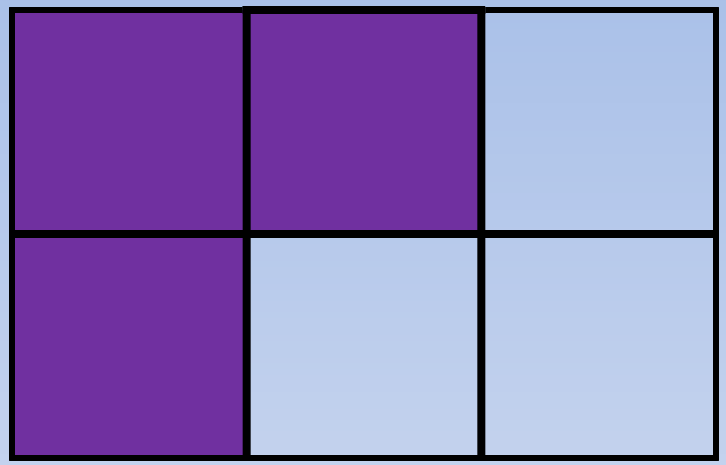
Mixed Numbers and Improper Fractions

4.5.2020

What is a fraction?



$\frac{3}{6}$

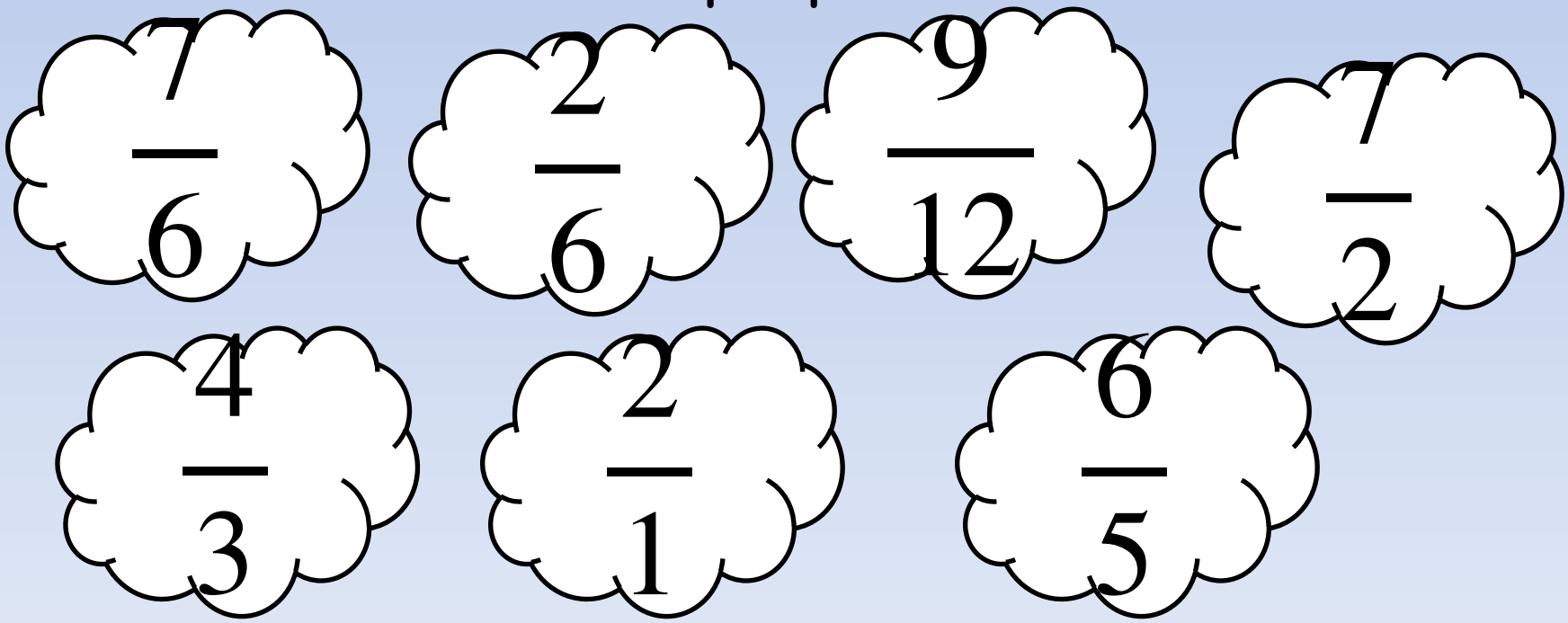
Number of shaded parts

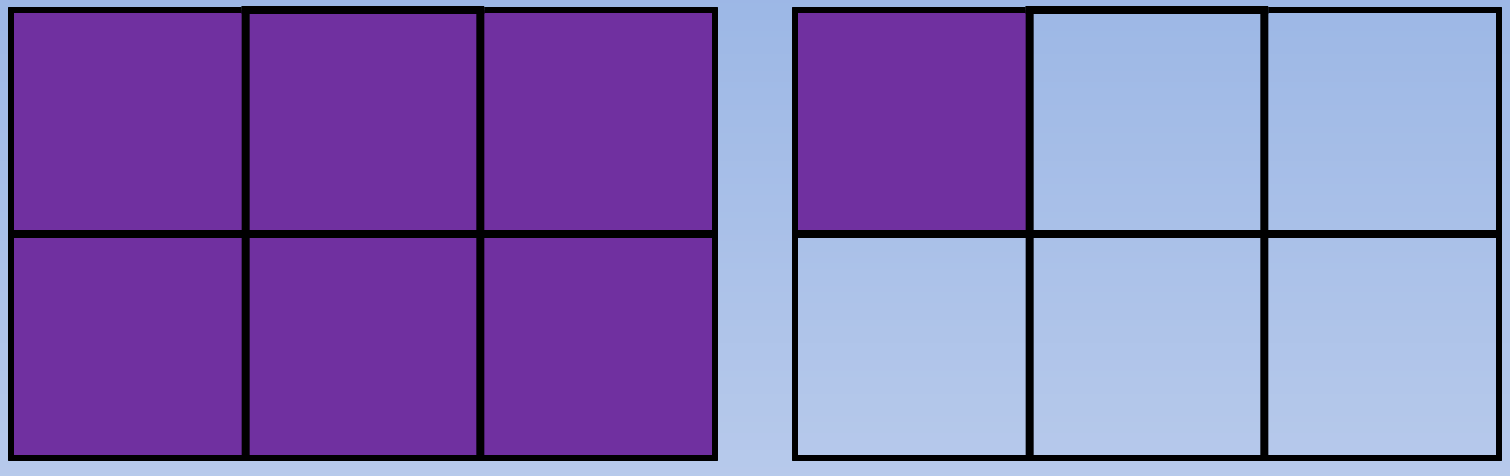
Shape is divided into 6 parts

Improper Fraction

An improper fraction where the numerator (top number) is bigger than the denominator (bottom number)

Which clouds have improper fractions in them?

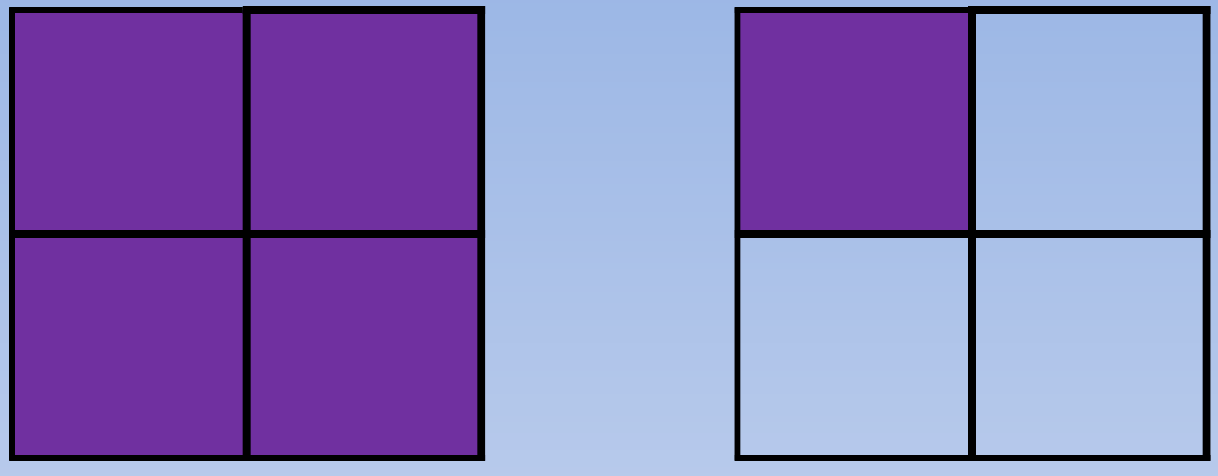




7 parts shaded in!

$\frac{7}{6}$

Shape is divided into 6 parts

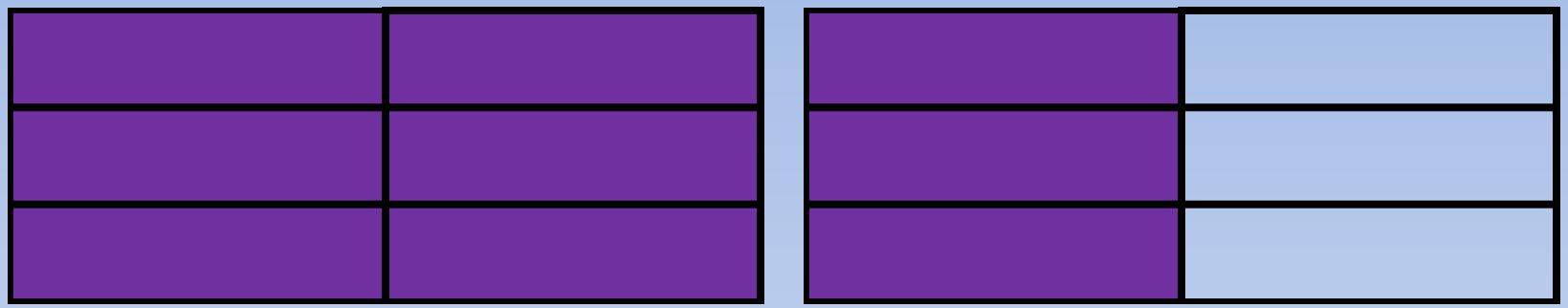


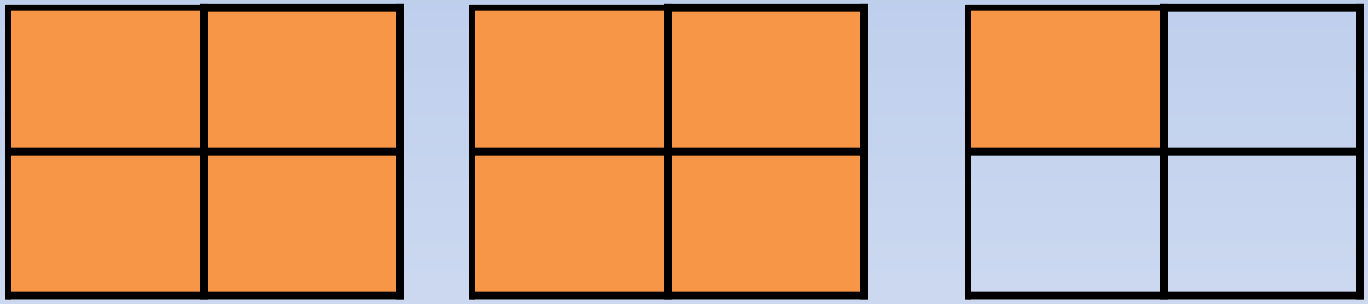
5 parts shaded in!

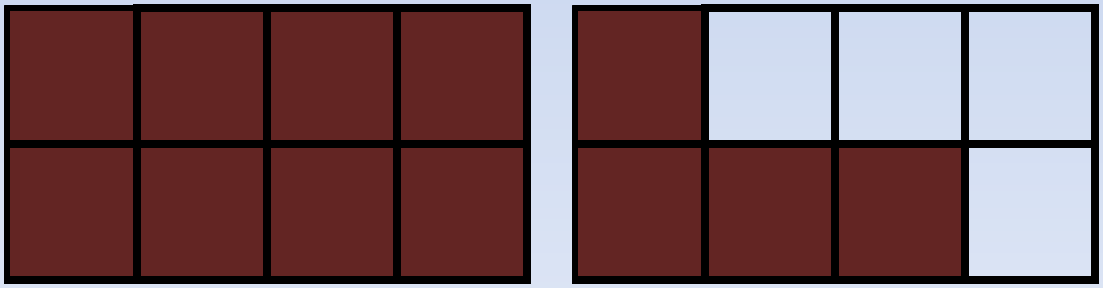
$\frac{5}{4}$

Shape is divided into 4 parts

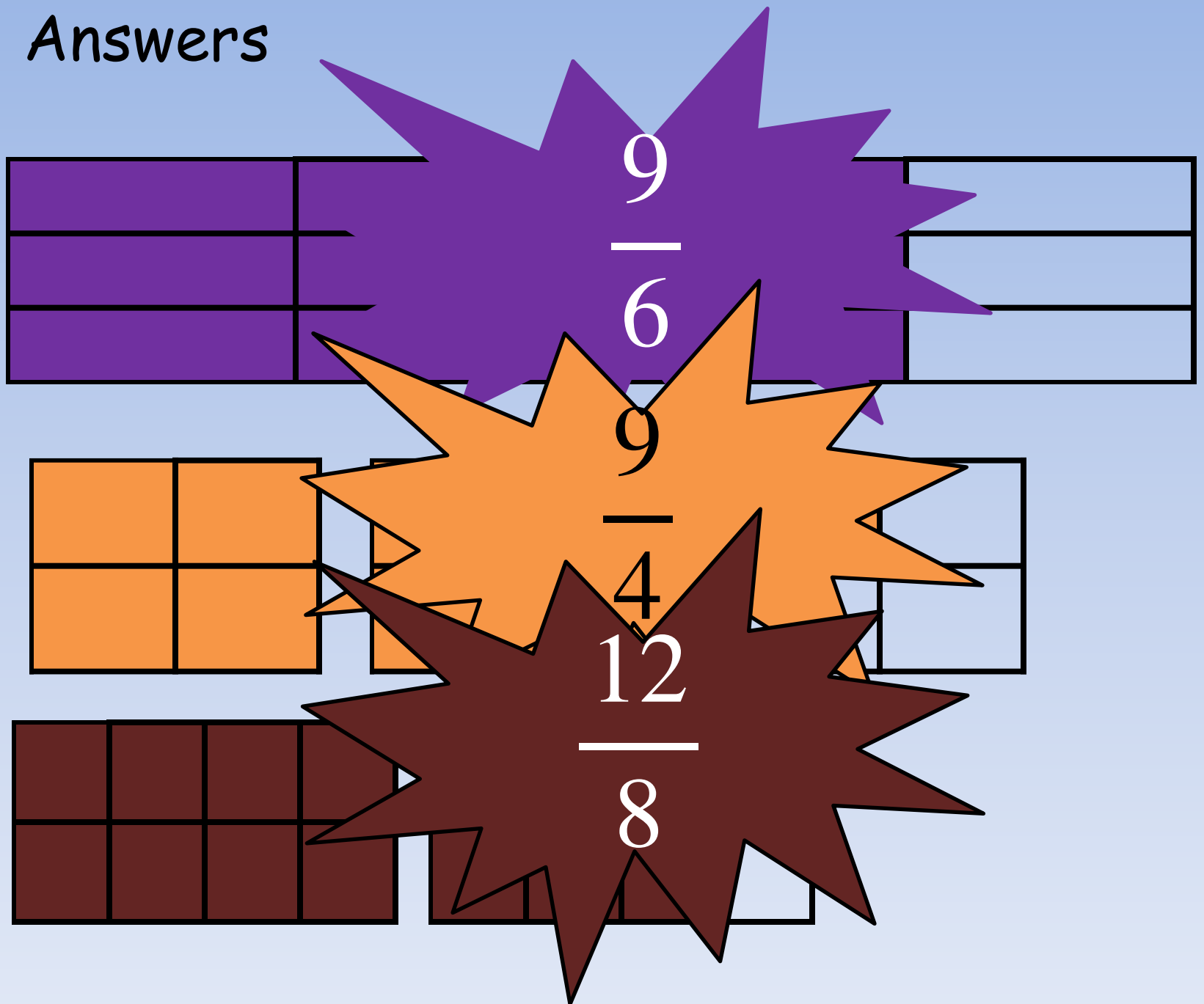
What improper fractions are shown in these pictures?







Answers



Mixed Numbers

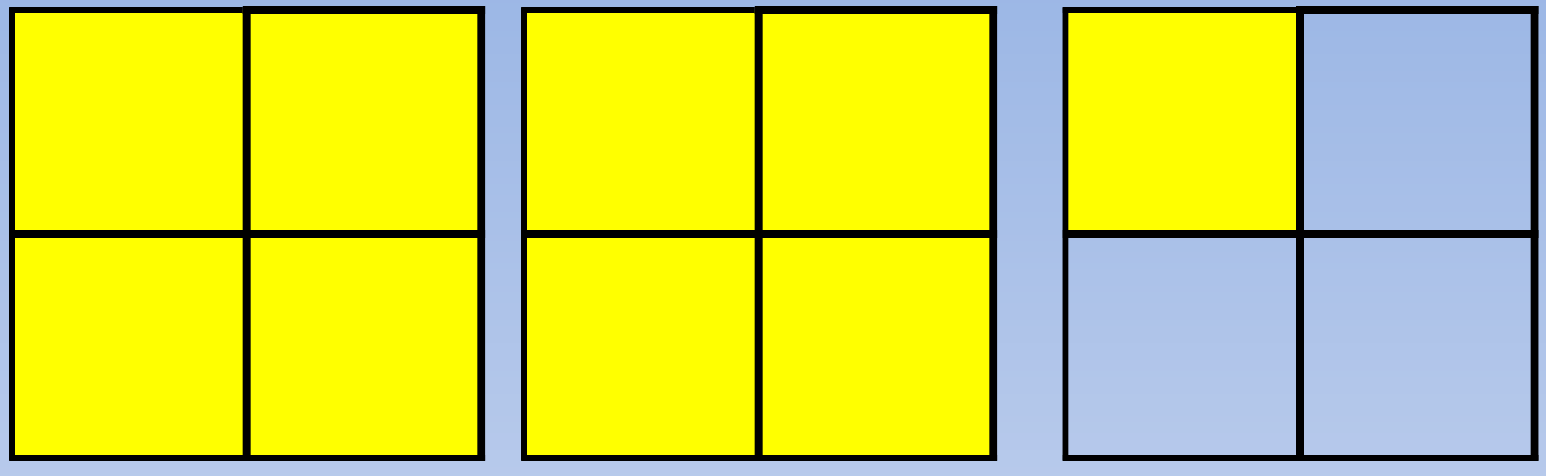
A mixed number is made of a whole number and a fraction.

$2\frac{1}{4}$

$5\frac{3}{7}$

$4\frac{3}{5}$

$5\frac{3}{7}$



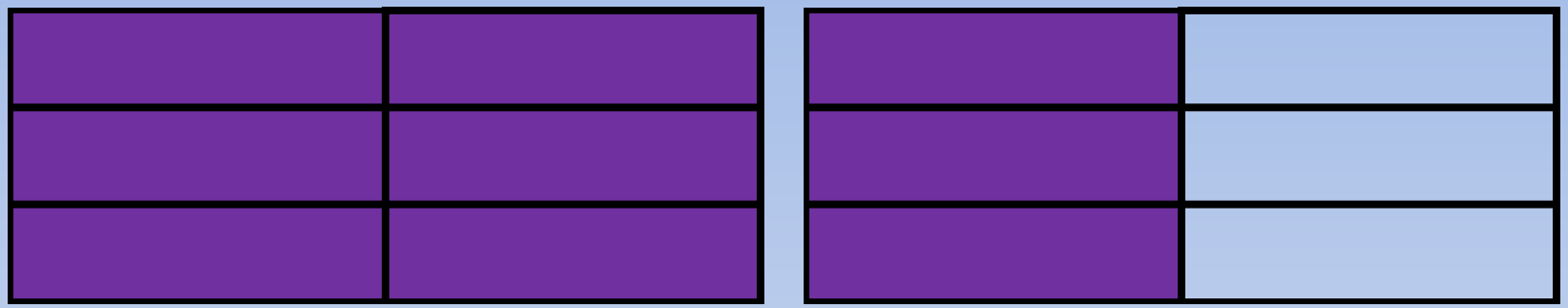
2 full shapes coloured in!

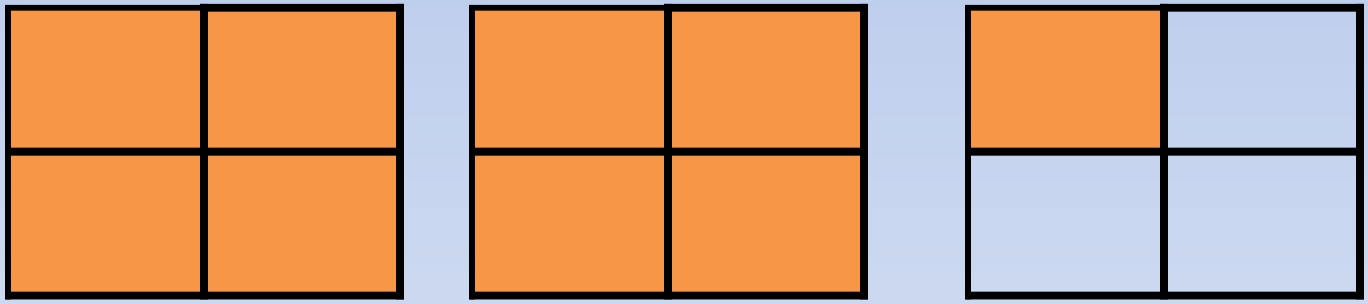
…with 1 more part shaded in

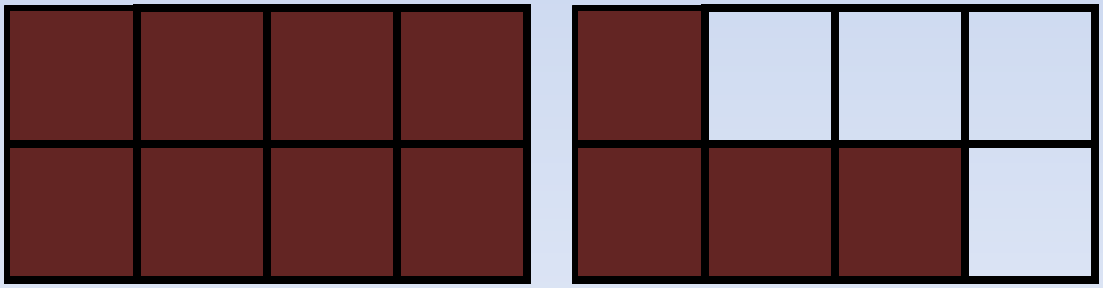
$$2\frac{1}{4}$$

Shape is divided into 4 parts

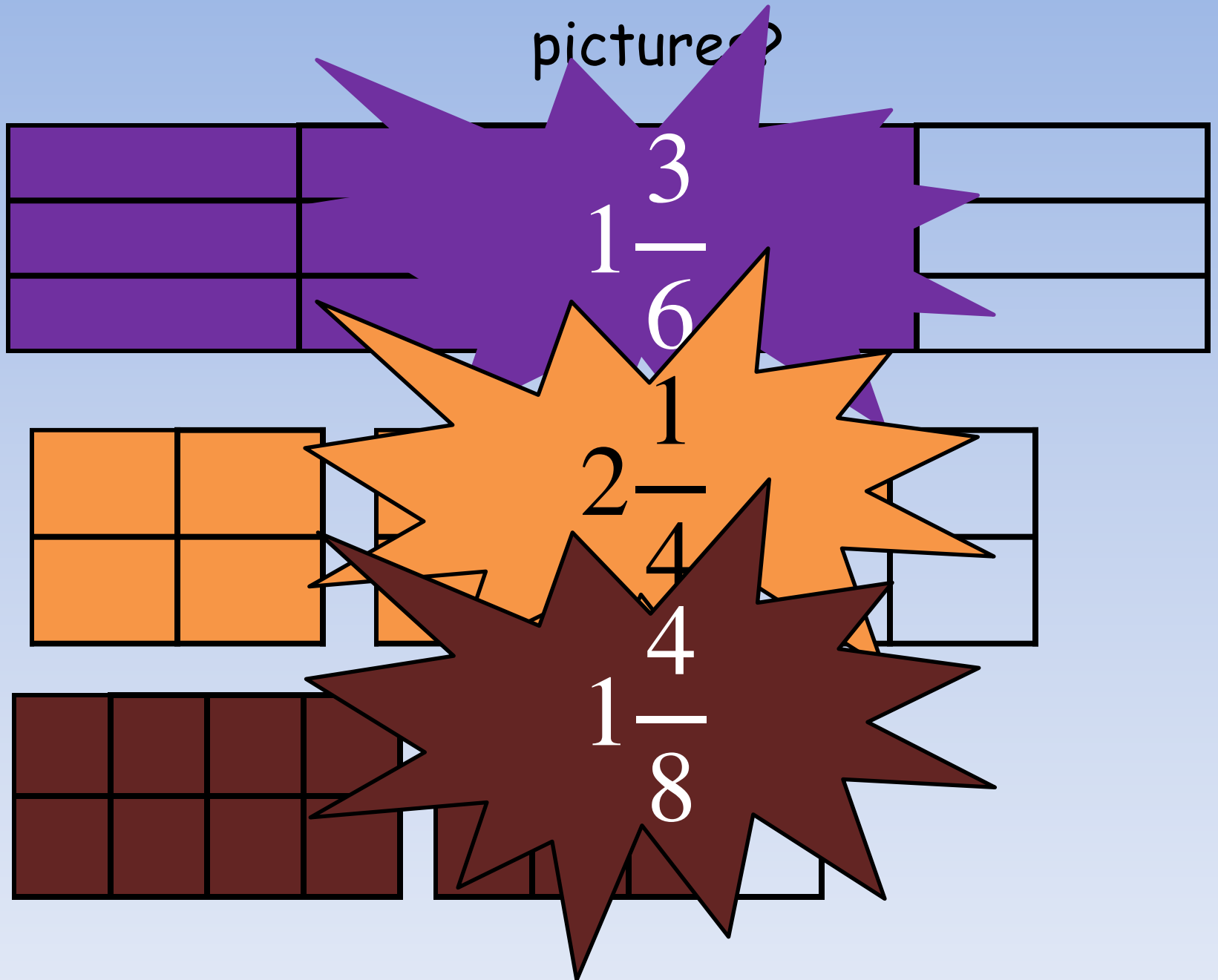
What mixed numbers are shown in these pictures?

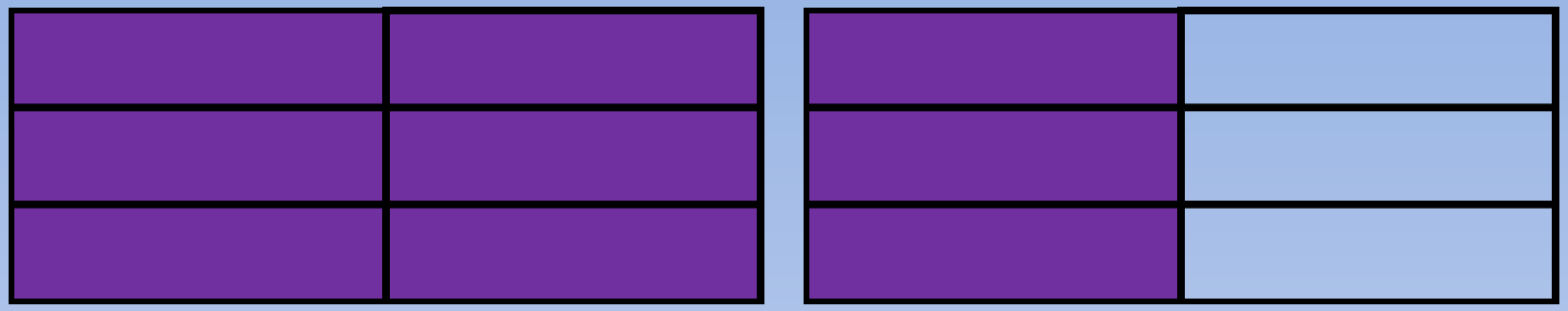






What mixed numbers are shown in these pictures?





$1\frac{3}{6}$ *is the same as* $\frac{9}{4}$

Is there any way you can think of to change $1\frac{3}{6}$ *to* $\frac{9}{4}$?

Mixed number to improper fraction

$1\frac{3}{6}$

$3 + 6 =$

$\frac{9}{6}$

$6 \times 1 = 6$

The shape is always divided into 6 parts. So our denominator (bottom number) doesn't change.

Mixed number to improper fraction

$$1\frac{2}{5} \xrightarrow{2 + 5 =} \frac{7}{5}$$

5x1 = 5

Mixed number to improper fraction

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

$3 \times 2 = 6$

$1 + 6 =$

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

The shape is always divided into 3 parts. So our denominator (bottom number) doesn't change.

Mixed number to improper fraction

$5\frac{3}{4}$

4x5 = 20

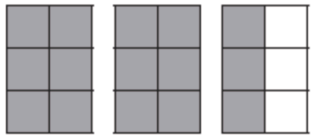
3 + 20 =

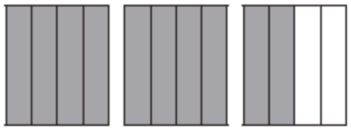
$\frac{23}{4}$

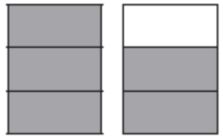
The shape is always divided into 4 parts. So our denominator (bottom number) doesn't change.

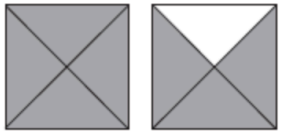
Task 1 - draw the diagrams in your books.

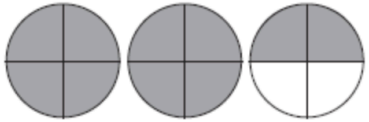
Write a mixed numeral for each of the shaded sets of shapes:

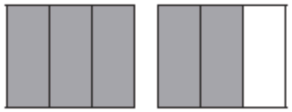
a  = ☐ ☐/☐

b  = ☐ ☐/☐

c  = ☐ ☐/☐

d  = ☐ ☐/☐

e  = ☐ ☐/☐

f  = ☐ ☐/☐

Task 2

Draw some diagrams or pictures that would represent:

a

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

b

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

c

$1 \text{ and } \frac{1}{4}$

d

$3 \text{ and } \frac{3}{4}$