

## Mixed numbers and improper fractions

### Before you Begin

1) Find each of the missing numbers indicated by a “?”

a)  $1 = \frac{?}{5}$

b)  $1 = \frac{?}{8}$

c)  $1 = \frac{11}{?}$

d)  $2 = \frac{?}{5}$

e)  $3 = \frac{?}{8}$

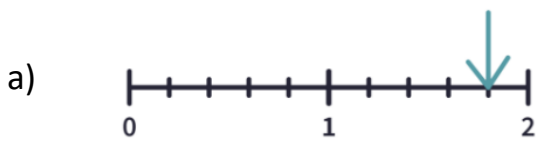
f)  $7 = \frac{?}{11}$

g)  $9 = \frac{?}{6}$

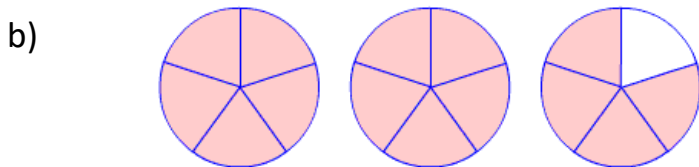
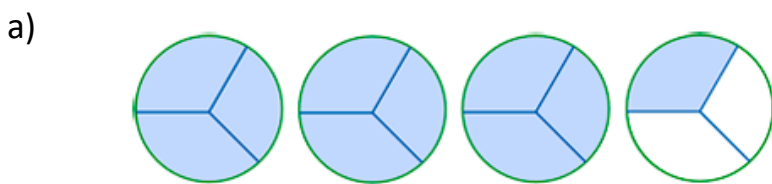
h)  $8 = \frac{32}{?}$

i)  $7 = \frac{?}{8}$

2) Write down the number given to you on this number line as a mixed number and improper fraction



3) Write the number of circles in these pictures as both a mixed number and improper fraction



**A** Convert the following mixed numbers into improper fractions

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

2).  $5 \frac{1}{2}$

3).  $7 \frac{2}{3}$

4).  $4 \frac{3}{4}$

5).  $2 \frac{1}{6}$

6).  $3 \frac{2}{7}$

7).  $4 \frac{4}{5}$

8).  $6 \frac{3}{4}$

9).  $9 \frac{1}{2}$

10).  $7 \frac{3}{5}$

**B** Convert the following improper fractions into mixed numbers

1).  $\frac{11}{2}$

2).  $\frac{19}{4}$

3).  $\frac{23}{5}$

4).  $\frac{28}{3}$

5).  $\frac{37}{6}$

6).  $\frac{50}{7}$

7).  $\frac{55}{9}$

8).  $\frac{47}{4}$

9).  $\frac{32}{3}$

10).  $\frac{43}{2}$

**C** is for Challenge

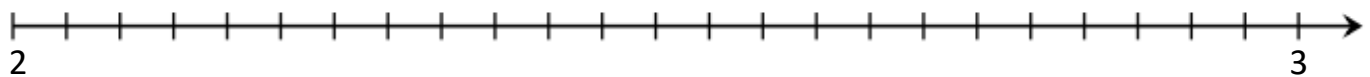
1) Place the following fractions in order from smallest to largest:

a)  $\frac{3}{7}, \frac{4}{9}, \frac{5}{11}, \frac{8}{21}$                       b)  $3\frac{1}{2}, \frac{10}{3}, \frac{17}{6}, 3\frac{4}{9}$

2) Write  $\frac{2022}{35}$  as a mixed number

3) How much bigger is  $3\frac{7}{8}$  than  $\frac{29}{8}$  ?

4) Find the location of  $2\frac{1}{3}, 2\frac{3}{4}$  and  $\frac{21}{8}$  on the following number line



5) What fraction is shown by the arrow below?



**Answers**

1a) 5   b) 8   c) 11   d) 10   e) 24   f) 77   g) 54   h) 4   i) 56

2a)  $1\frac{4}{5}$  and  $\frac{9}{5}$    b)  $4\frac{1}{3}$  and  $\frac{13}{3}$  or  $4\frac{2}{6}$  and  $\frac{26}{6}$

3a)  $\frac{10}{3}$  and  $3\frac{1}{3}$    b)  $2\frac{4}{5}$  and  $\frac{14}{5}$

A.   1).  $\frac{7}{3}$       2).  $\frac{11}{2}$       3).  $\frac{23}{3}$       4).  $\frac{19}{4}$       5).  $\frac{13}{6}$   
      6).  $\frac{23}{7}$       7).  $\frac{24}{5}$       8).  $\frac{27}{4}$       9).  $\frac{19}{2}$       10).  $\frac{38}{5}$

B.   1).  $5\frac{1}{2}$       2).  $4\frac{3}{4}$       3).  $4\frac{3}{5}$       4).  $9\frac{1}{3}$       5).  $6\frac{1}{6}$   
      6).  $7\frac{1}{7}$       7).  $6\frac{1}{9}$       8).  $11\frac{3}{4}$       9).  $10\frac{2}{3}$       10).  $21\frac{1}{2}$

**C**    1a)  $\frac{8}{21}, \frac{3}{7}, \frac{4}{9}, \frac{5}{11}$    b)  $\frac{17}{6}, \frac{10}{3}, 3\frac{4}{9}, 3\frac{1}{2}$

2)  $57\frac{27}{35}$    3)  $\frac{2}{8}$  or  $\frac{1}{4}$

4) from the left; 8 pips along, 18 pips along, 15 pips along

5)  $\frac{31}{12}$  or  $2\frac{7}{12}$