Equivalent fractions

| $\frac{1}{2}$ | $\frac{1}{2}$ |

| $\frac{1}{3}$ | $\frac{1}{3}$ | $\frac{1}{3}$ |

| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

| $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ |

| $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ |

| $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ |

1 How many:

a halves in one whole?_____ b quarters in one whole?_____ c twelfths in 1 whole?_____

d thirds in one whole?_____ e sixths in 1 whole?_____ f eighths in 1 whole?_____

2 Complete.

a $\frac{\square}{2} = 1$ b $\frac{\square}{12} = 1$ c $\frac{4}{\square} = 1$ d $\frac{3}{3} = \square$ e $\frac{\square}{6} = 1$

3 a $\frac{1}{2} = \frac{\square}{4}$ b $\frac{1}{3} = \frac{\square}{6}$ c $\frac{1}{6} = \frac{\square}{12}$ d $\frac{1}{4} = \frac{\square}{8}$ e $\frac{1}{2} = \frac{\square}{12}$

4 Use the diagram.

a $1 - \frac{1}{3} =$ ____ b $1 - \frac{1}{6} =$ ____ c $1 - \frac{3}{4} =$ ____ d $1 - \frac{7}{12} =$ ____ e $1 - \frac{2}{3} =$ ____

f $1 - \frac{4}{8} =$ ____ g $1 - \frac{11}{12} =$ ____ h $1 - \frac{5}{6} =$ ____ i $1 - \frac{6}{8} =$ ____ j $1 - \frac{2}{12} =$ ____

5 Find a fraction which is equal to:

a $\frac{1}{2} =$ ____ b $\frac{1}{3} =$ ____ c $\frac{1}{6} =$ ____ d $\frac{3}{4} =$ ____ e $\frac{5}{6} =$ ____ f $\frac{2}{3} =$ ____

ACMNA102 Fractions and decimals • Compare and order common unit fractions and locate and represent them on a number line. • Recognise the connection between the order of unit fractions and their denominators.

1 Draw diagrams to show:

a $\frac{1}{3}$ b $\frac{3}{8}$ c $\frac{4}{6}$

2 Write these on the number lines.

a $\frac{1}{3}, \frac{2}{3}$
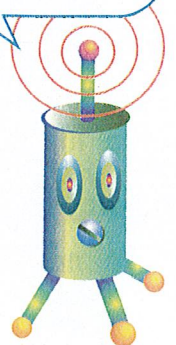
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b $\frac{1}{6}, \frac{3}{6}, \frac{4}{6}$

0

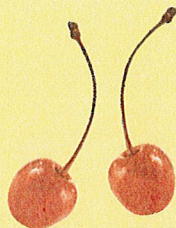c $\frac{1}{12}, \frac{3}{12}, \frac{7}{12}, \frac{10}{12}$
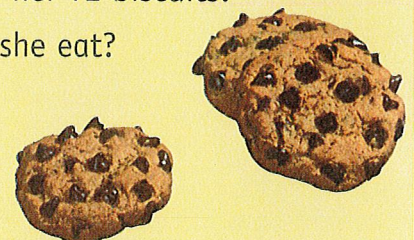
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d $\frac{1}{3}, \frac{5}{12}, \frac{5}{6}, \frac{1}{2}$
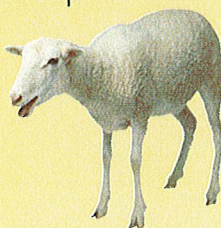
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> These fractions are all smaller than 1.

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a John had 6 cherries and gave $\frac{1}{3}$ to Bill.

How many did Bill get?

b Cherie ate $\frac{1}{4}$ of her 12 biscuits.

How many did she eat?

c Maisie sold $\frac{1}{6}$ of her 42 sheep.

How many did she sell?

d Class 5X has $\frac{1}{12}$ of its 36 pupils away ill.

How many are at school?

4 Write your own fraction problem which has an answer of 5 pencils.

ACMNA102 Fractions and decimals • Compare and order common unit fractions and locate and represent them on a number line.

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