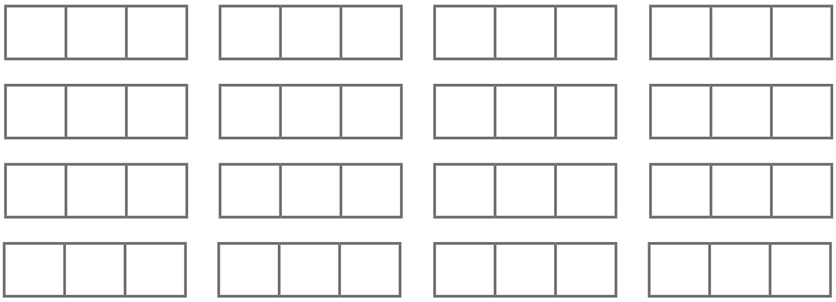
1) Class 5 are exploring different methods of multiplying mixed numbers.

a) Shade the bar models to represent $3\frac{2}{3} \times 4$.



b) Complete Theo's repeated addition calculation, giving the answer in its simplest form.

$3\frac{2}{3} \times 4 =$ ______ + ______ + ______ + ______ = ______ = ______

c) Isha is using a different method. She has partitioned the whole and the fraction to multiply them separately. Complete her calculation, giving the answer in its simplest form.

$3 \times 4 =$ ______

$\frac{2}{3} \times 4 =$ ______

______ + ______ = ______

d) Vicky converted the mixed number to an improper fraction to multiply. Show her calculation, giving the answer in its simplest form.

____

2) Now choose a method to answer each question.

a) $2\frac{3}{5} \times 2 =$

____

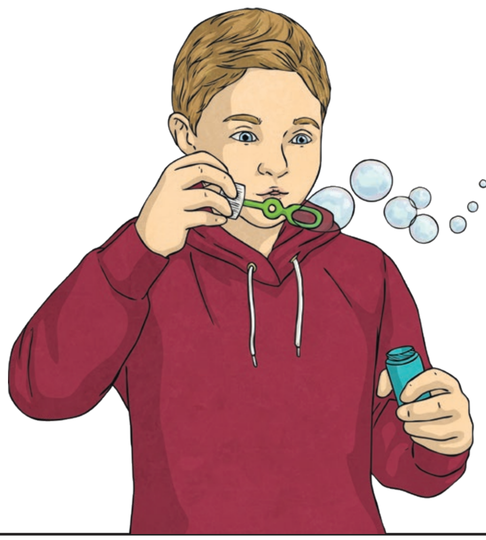
b) $4 \times 1\frac{3}{4} =$

____

3) Match the calculation to the correct answer.

$3\frac{1}{3} \times 4$ | $3 \times 4\frac{1}{4}$ | $2\frac{2}{5} \times 3$ | $2\frac{3}{5} \times 3$

$7\frac{1}{5}$ | $7\frac{4}{5}$ | $12\frac{3}{4}$ | $13\frac{1}{3}$



1) Ted is making bubble mixture for his bubble machine. To make one portion, he mixes $2\frac{1}{4}$ litres of water with $4\frac{2}{3}$ tablespoons of washing-up liquid.

Ted makes one portion of bubble mixture for himself and one each for his three friends.

a) How much water will he need?

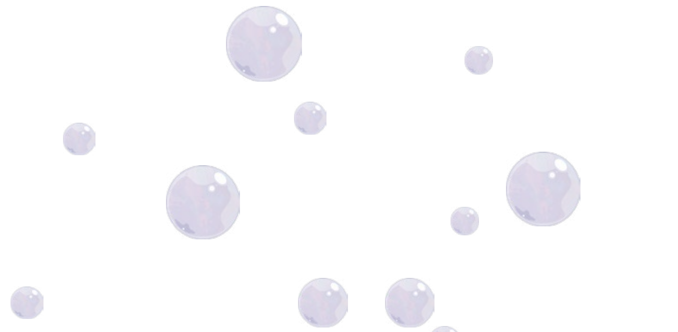
b) How many tablespoons of washing-up liquid will he need?

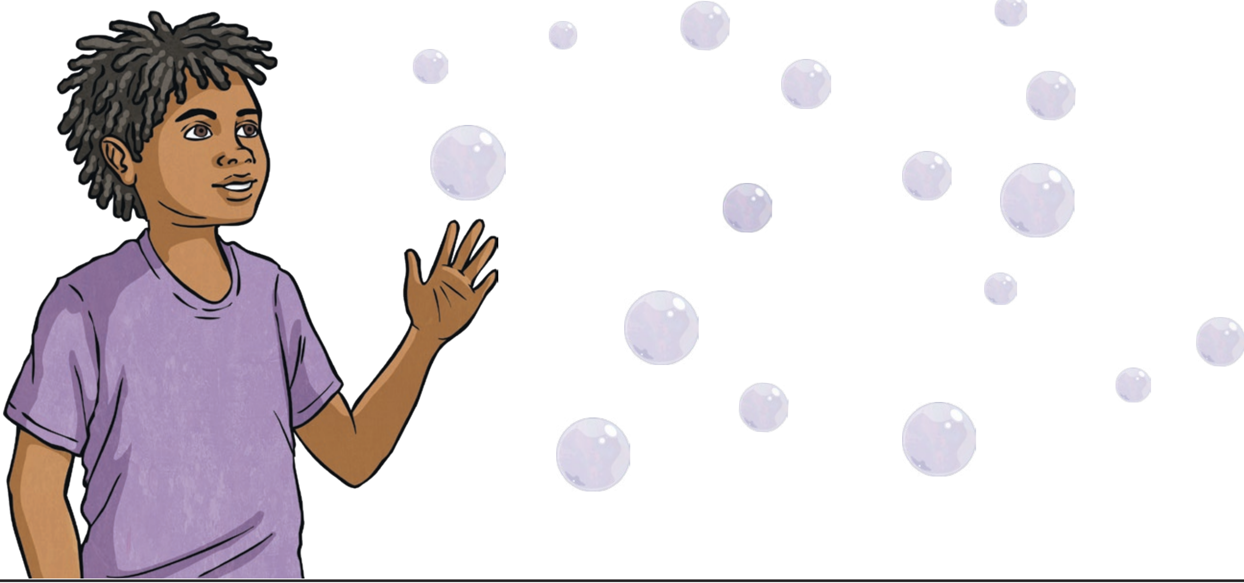
2) Complete the statements using the symbols <, > or =.

a) $2\frac{3}{5} \times 3$ ◯ $2\frac{5}{10} \times 4$

b) $4\frac{3}{4} \times 2$ ◯ $3\frac{5}{6} \times 3$

c) $2\frac{3}{4} \times 4$ ◯ $5\frac{1}{4} \times 2$





1) What could the value of the missing digits be? Find two possible solutions.

$$\square\frac{\square}{4} \times 3 = 2\frac{3}{\square} \times \square \qquad\qquad \square\frac{\square}{4} \times 3 = 2\frac{3}{\square} \times \square$$

2) On average, a shallower bath uses $72\frac{3}{8}$ litres of water, whereas a deeper bath uses $80\frac{3}{4}$ litres of water.

In one year, how much more water would always taking a deep bath use than always taking a shallow bath, if someone had 3 baths a week?

Show your working out.

Taking a deep bath would use ______________ more litres of water than taking a shallow bath.

3) Write a problem that involves multiplying mixed numbers for your partner to solve.

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