1 Complete the calculations.

Use bar models to help you.

a) $\frac{2}{7} + \frac{2}{7} + \frac{2}{7} = \boxed{}$ $3 \times \frac{2}{7} = \boxed{}$

b) $\frac{3}{10} + \frac{3}{10} + \frac{3}{10} = \boxed{}$ $3 \times \frac{3}{10} = \boxed{}$

c) $\frac{2}{9} + \frac{2}{9} + \frac{2}{9} + \frac{2}{9} = \boxed{}$ $4 \times \frac{2}{9} = \boxed{}$

d) $\frac{4}{9} + \frac{4}{9} = \boxed{}$ $2 \times \frac{4}{9} = \boxed{}$

What do you notice about parts c) and d)? Talk to a partner.

2 Complete the multiplications.

a) $2 \times \frac{3}{7} = \boxed{}$ d) $5 \times \frac{2}{11} = \boxed{}$

b) $3 \times \frac{3}{11} = \boxed{}$ e) $\frac{2}{15} \times 7 = \boxed{}$

c) $\frac{2}{11} \times 4 = \boxed{}$ f) $\frac{7}{15} \times 2 = \boxed{}$

3

$\frac{4}{11} \times 2 = \frac{8}{22}$
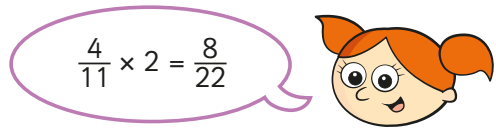
Explain the mistake that Alex has made.

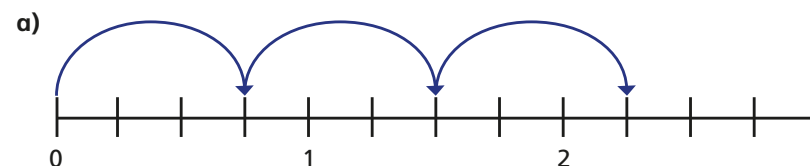**4** A cat eats $\frac{2}{15}$ of a bag of biscuits a day.

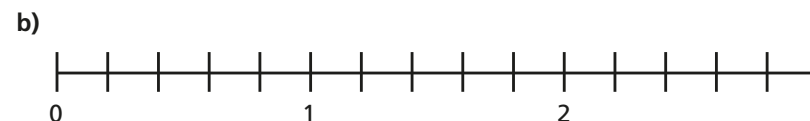What fraction of the bag does the cat eat in 4 days?

5 Complete the multiplications.
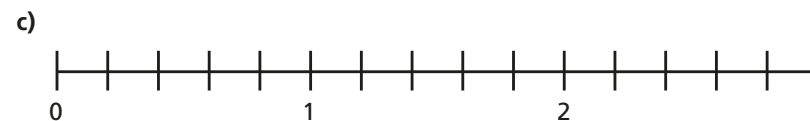
Use the number lines to help you.

Give each answer as an improper fraction and as a mixed number.

a)

$3 \times \frac{3}{4} = \boxed{} = \boxed{}$

b)

$4 \times \frac{3}{5} = \boxed{} = \boxed{}$

c)

$3 \times \frac{4}{5} = \boxed{} = \boxed{}$

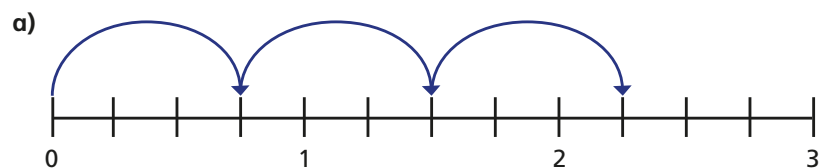**4** A cat eats $\frac{2}{15}$ of a bag of biscuits a day.

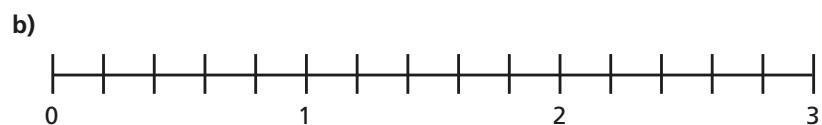What fraction of the bag does the cat eat in 4 days?

5 Complete the multiplications.
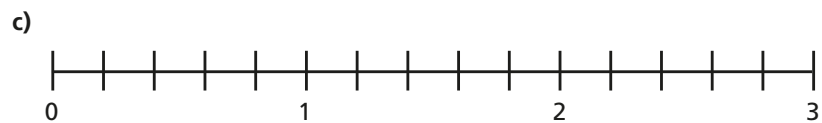
Use the number lines to help you.

Give each answer as an improper fraction and as a mixed number.

a)

$3 \times \frac{3}{4} = \boxed{} = \boxed{}$

b)

$4 \times \frac{3}{5} = \boxed{} = \boxed{}$

c)

$3 \times \frac{4}{5} = \boxed{} = \boxed{}$

6 Complete the multiplications.

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

b) $4 \times \frac{4}{5} = \boxed{} = \boxed{}$

c) $\frac{2}{7} \times 11 = \boxed{} = \boxed{}$

d) $4 \times \frac{7}{9} = \boxed{} = \boxed{}$

e) $17 \times \frac{2}{11} = \boxed{} = \boxed{}$

f) Describe the pattern you can see in the answers.

g) What could the next multiplication in the pattern be?

Write two possible options.

7 Here are some digit cards.

| 1 | 3 | 5 | 7 |

Use the digit cards to complete the multiplication.

$\boxed{} \times \dfrac{\boxed{}}{8} = \dfrac{15}{8} = \boxed{}\dfrac{\boxed{}}{8}$