

# Multiply unit fractions by an integer



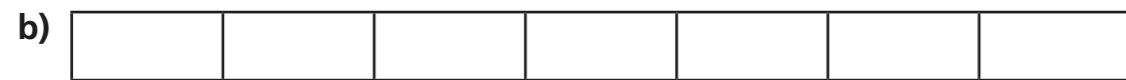
1 Complete the calculations.

Use the bar models to help you.



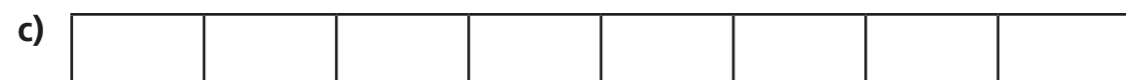
$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \square$$

$$3 \times \frac{1}{5} = \square$$



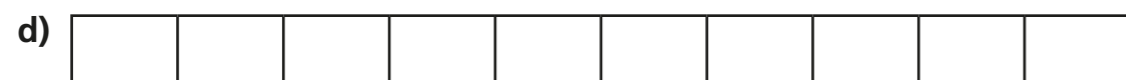
$$\frac{1}{7} + \frac{1}{7} + \frac{1}{7} + \frac{1}{7} = \square$$

$$4 \times \frac{1}{7} = \square$$



$$\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \square$$

$$5 \times \frac{1}{8} = \square$$



$$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \square$$

$$7 \times \frac{1}{10} = \square$$

2 Complete the multiplications.

a)  $3 \times \frac{1}{8} = \square$

e)  $\frac{1}{5} \times 4 = \square$

b)  $3 \times \frac{1}{10} = \square$

f)  $\frac{1}{9} \times 8 = \square$

c)  $\frac{1}{8} \times 5 = \square$

g)  $8 \times \frac{1}{11} = \square$

d)  $9 \times \frac{1}{10} = \square$

h)  $\frac{1}{11} \times 10 = \square$

3 Match the addition to the equivalent multiplication.

$$\frac{1}{3} + \frac{1}{3}$$

$$2 \times \frac{1}{5}$$

$$\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

$$\frac{1}{4} \times 3$$

$$\frac{1}{5} + \frac{1}{5}$$

$$3 \times \frac{1}{5}$$

$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

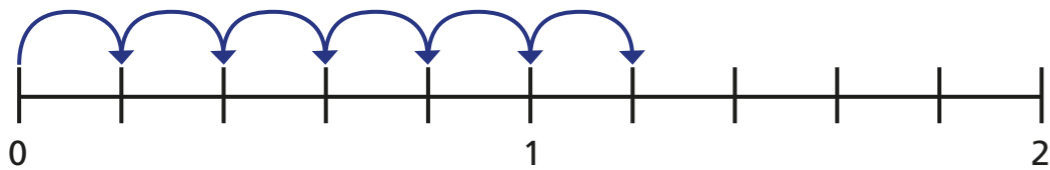
$$2 \times \frac{1}{3}$$

- 4 A pizza is cut into sixths.  
Jack eats five of the slices.  
Write a multiplication to represent this.

$$\square \times \square = \square$$

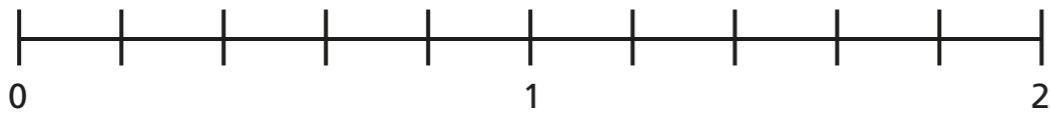
- 5 Complete the multiplications.  
Use the number lines to help you.  
Give each answer as an improper fraction and as a mixed number.

a)



$$6 \times \frac{1}{5} = \square = \square$$

b)



$$9 \times \frac{1}{5} = \square = \square$$

- 6 Complete the multiplications.

a)  $11 \times \frac{1}{10} = \square = \square$

b)  $11 \times \frac{1}{9} = \square = \square$

c)  $\frac{1}{8} \times 11 = \square = \square$

d)  $11 \times \frac{1}{7} = \square = \square$

e)  $11 \times \frac{1}{6} = \square = \square$

What do you notice?

Does this pattern continue?

- 7 Complete the calculations.

a)  $\square \times \frac{1}{3} = \frac{2}{3}$

e)  $\frac{1}{8} \times \square = 1\frac{3}{8}$

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

f)  $\square \times \frac{1}{2} = 3\frac{1}{2}$

c)  $\square \times \frac{1}{7} = 1$

g)  $\square \times \frac{1}{3} = 3\frac{1}{3}$

d)  $\frac{1}{7} \times \square = 1\frac{3}{7}$

h)  $\frac{1}{4} \times \square = 3\frac{1}{4}$

