## Multiply unit fractions by an integer



Complete the calculations.

Use the bar models to help you.



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

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

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

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

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

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

$$\frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} + \frac{1}{10} = \boxed{7 \times \frac{1}{10} = }$$

## Complete the multiplications.

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

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

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

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

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

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

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

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

## 3 Match the addition to the equivalent multiplication.

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

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

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

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

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

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

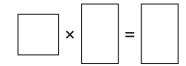
$$\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$$

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

4 A pizza is cut into sixths.

Jack eats five of the slices.

Write a multiplication to represent this.

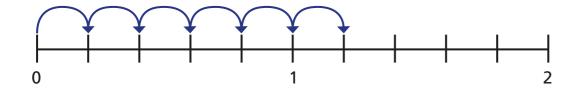


5 Complete the multiplications.

Use the number lines to help you.

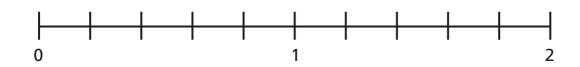
Give each answer as an improper fraction and as a mixed number.

a)

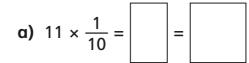


$$6 \times \frac{1}{5} = \boxed{\phantom{0}}$$

b)



6 Complete the multiplications.



**b)** 
$$11 \times \frac{1}{9} = \boxed{\phantom{0}}$$

c) 
$$\frac{1}{8} \times 11 = \boxed{\phantom{0}}$$

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

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

What do you notice?

Does this pattern continue?

7 Complete the calculations.

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

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

**b)** 
$$= \frac{1}{3} = \frac{1}{3$$

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

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

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

d) 
$$\frac{1}{7} \times \boxed{} = 1 \div \frac{1}{2}$$

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



