

Mathematics

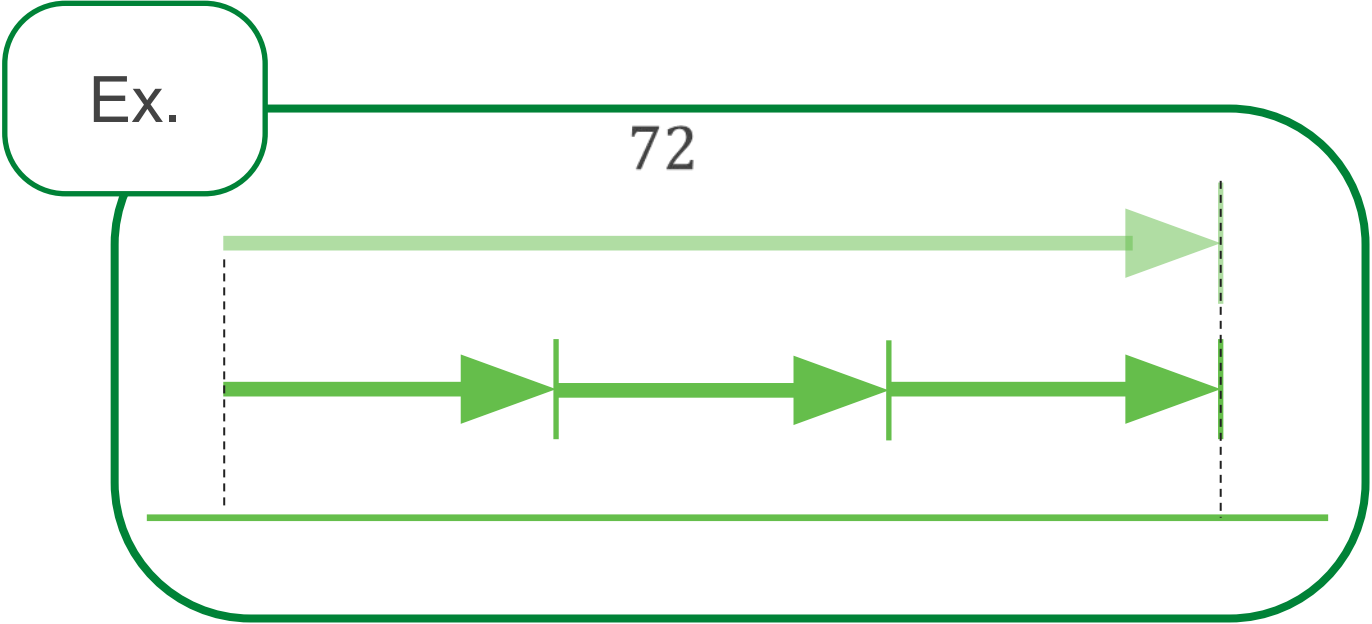
Multiplication as Scaling Worksheet

Mrs Buckmire



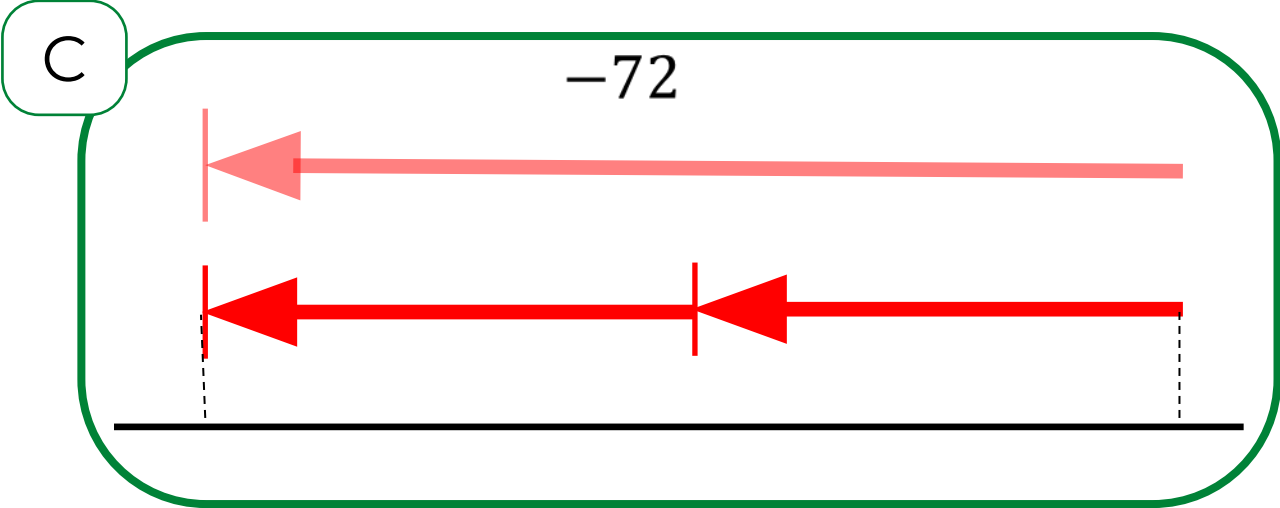
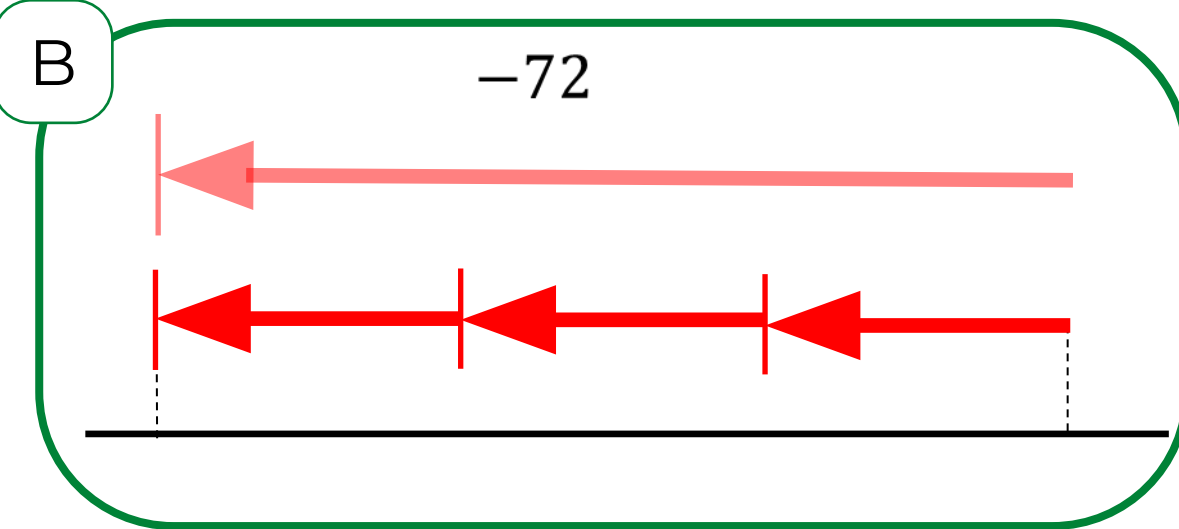
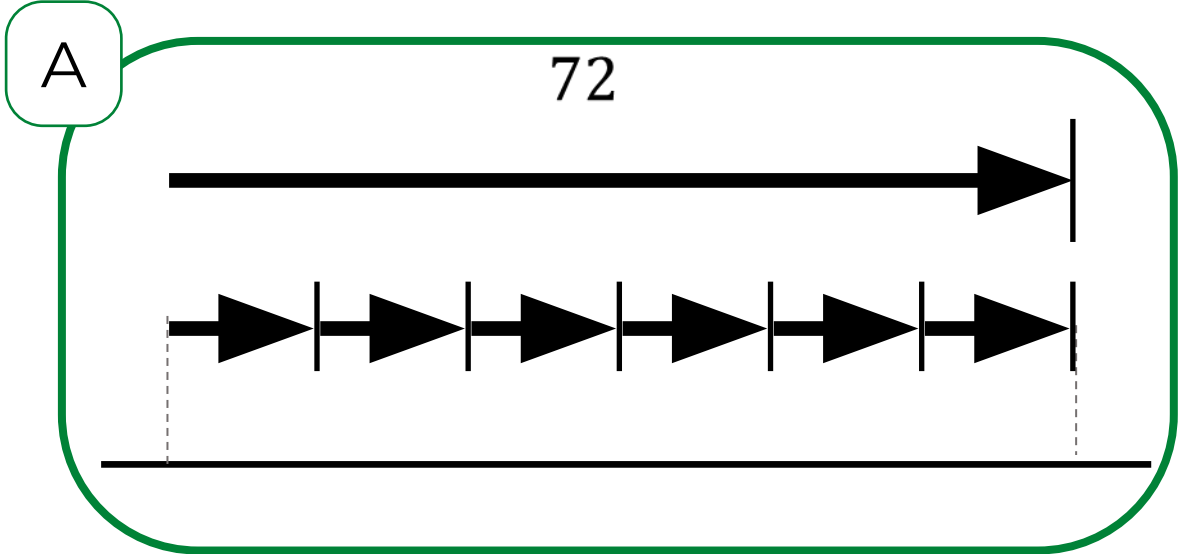
Try this

Write a calculation for each number line.
For the example:

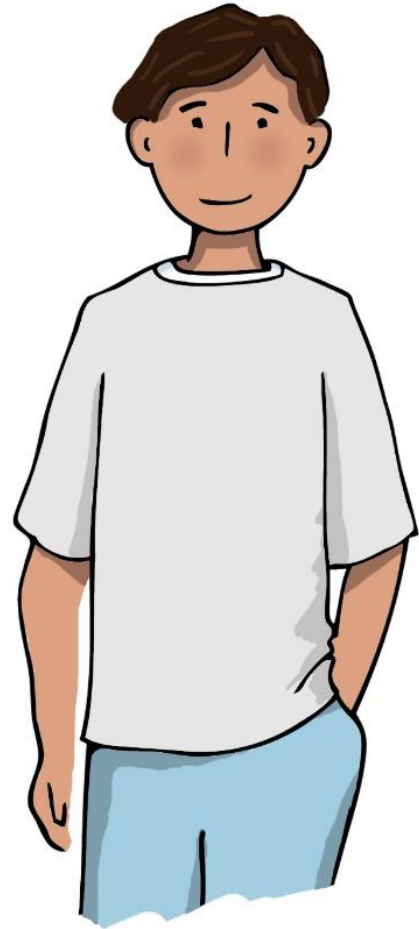


$$24 + 24 + 24 = 72$$

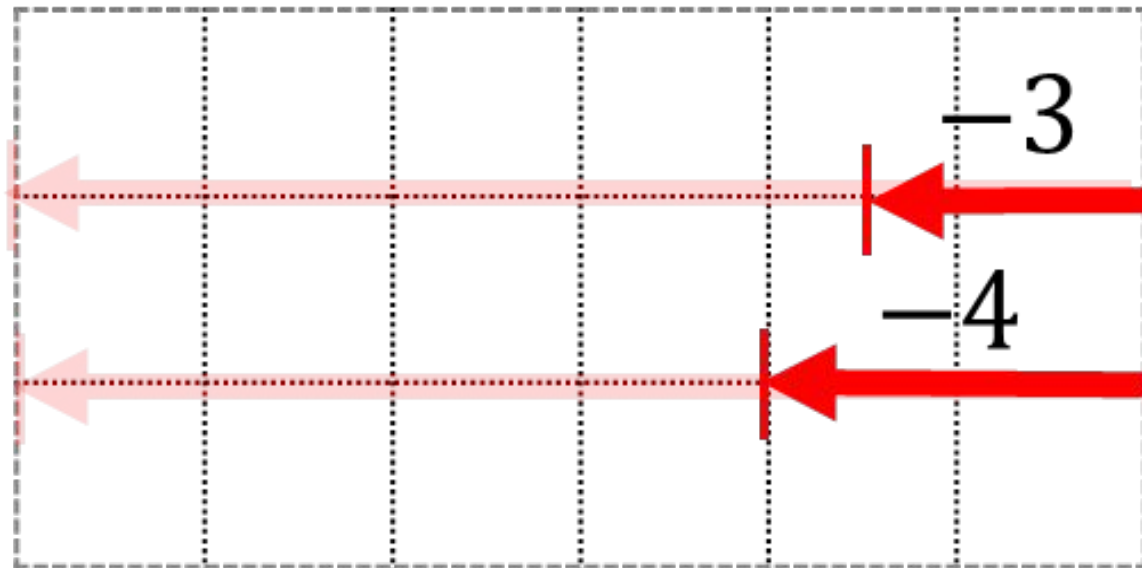
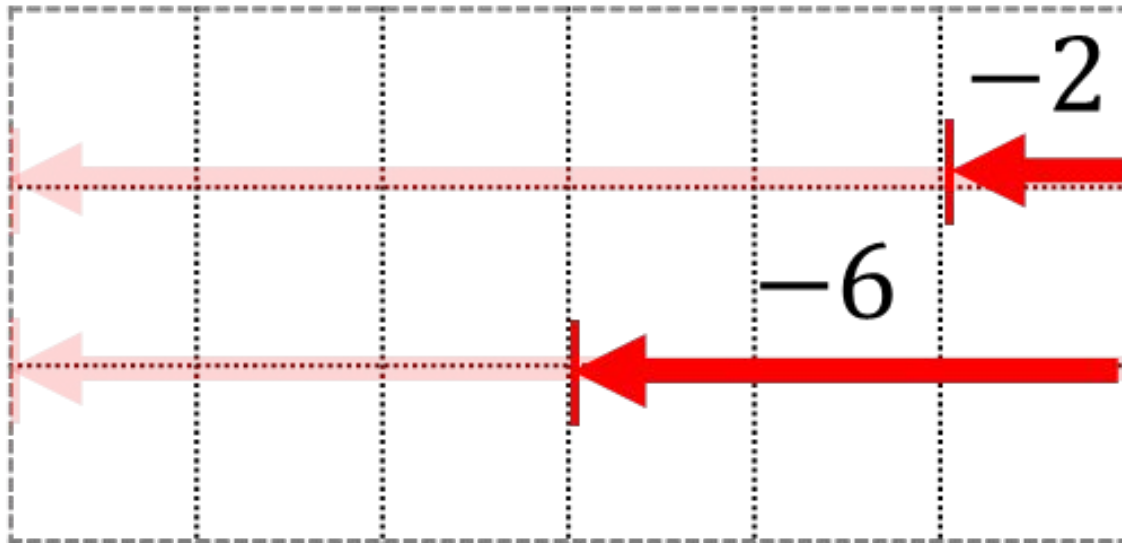
$$3 \times 24 = 72$$



Connect

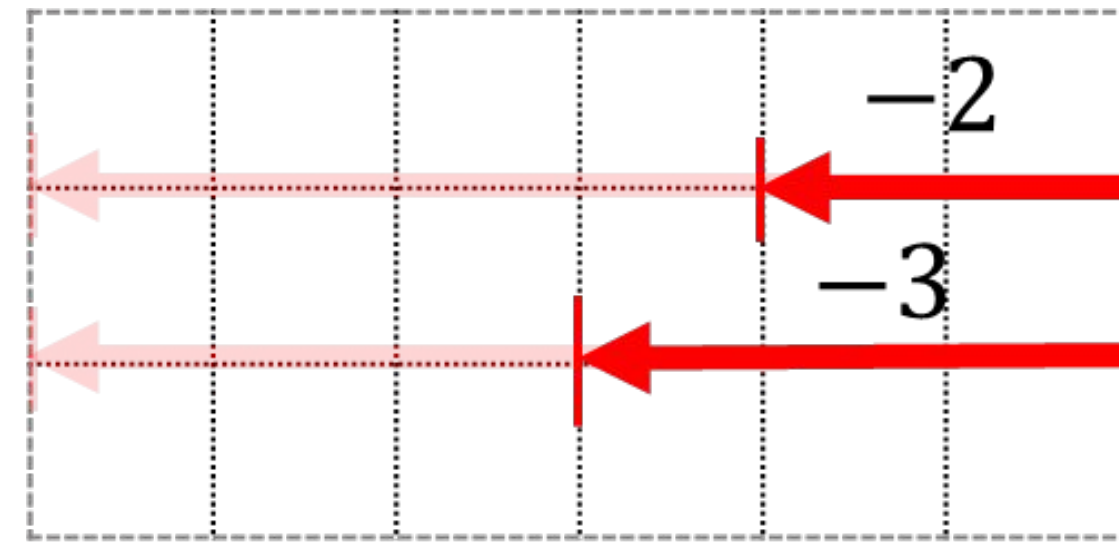


$$6 \times (-2) = 2 \times (-6)$$



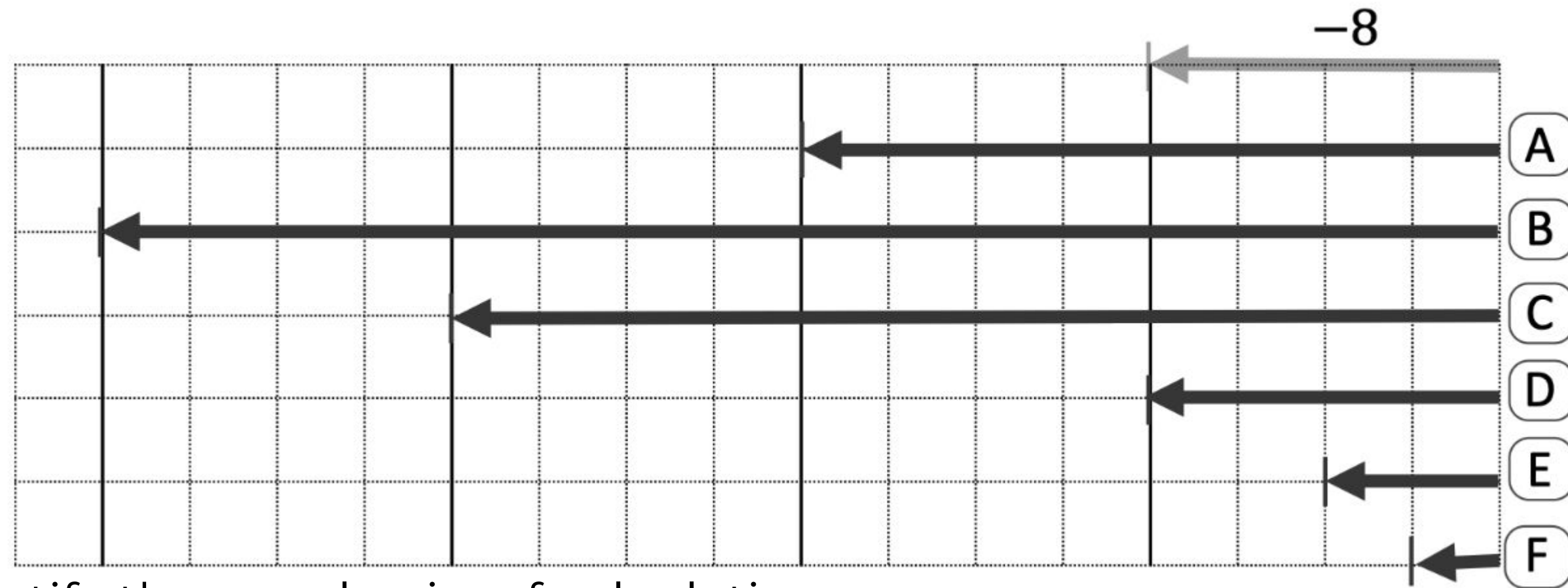
Your go!

$$3 \times (-2) = 2 \times (-3)$$



Independent task

1. For each representation complete the calculation $\square \times -8 = \square$ and state the scale factor.



2. Identify the equal pairs of calculations

- a) $6 \times (-5)$ b) $6 \times (-8)$ c) $(-1) \times 10$ d) $6 \times (-10)$
f) $8 \times (-6)$ g) $5 \times (-6)$ h) $15 \times (-4)$

e) $2 \times (-5)$



Explore

Generate examples of n where:

a) $3 \times n < 2 \times n$

b) $3 \times n > 2 \times n - 1$

c) $2 \times n - 1 < 3 \times n < 2 \times n$

