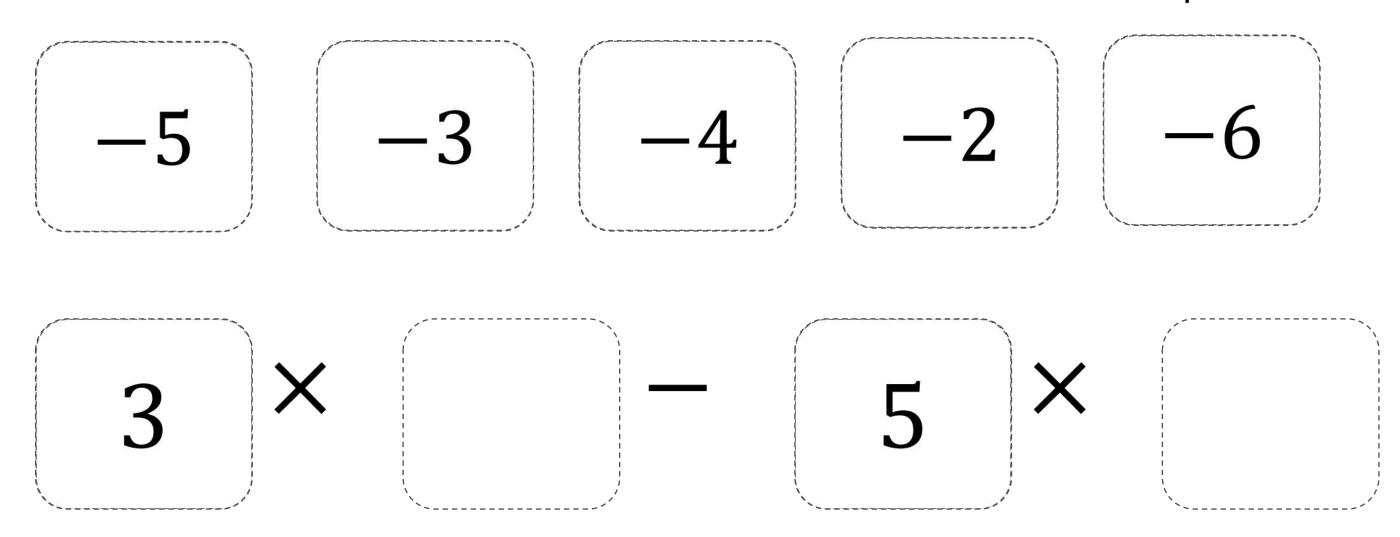
### Mathematics

# Negative Scale Factors Worksheet



# Try this

Use the two of the five number cards to fill the spaces.



What is the greatest number you can produce? What is the least?

Return to the video once completed



### Connect

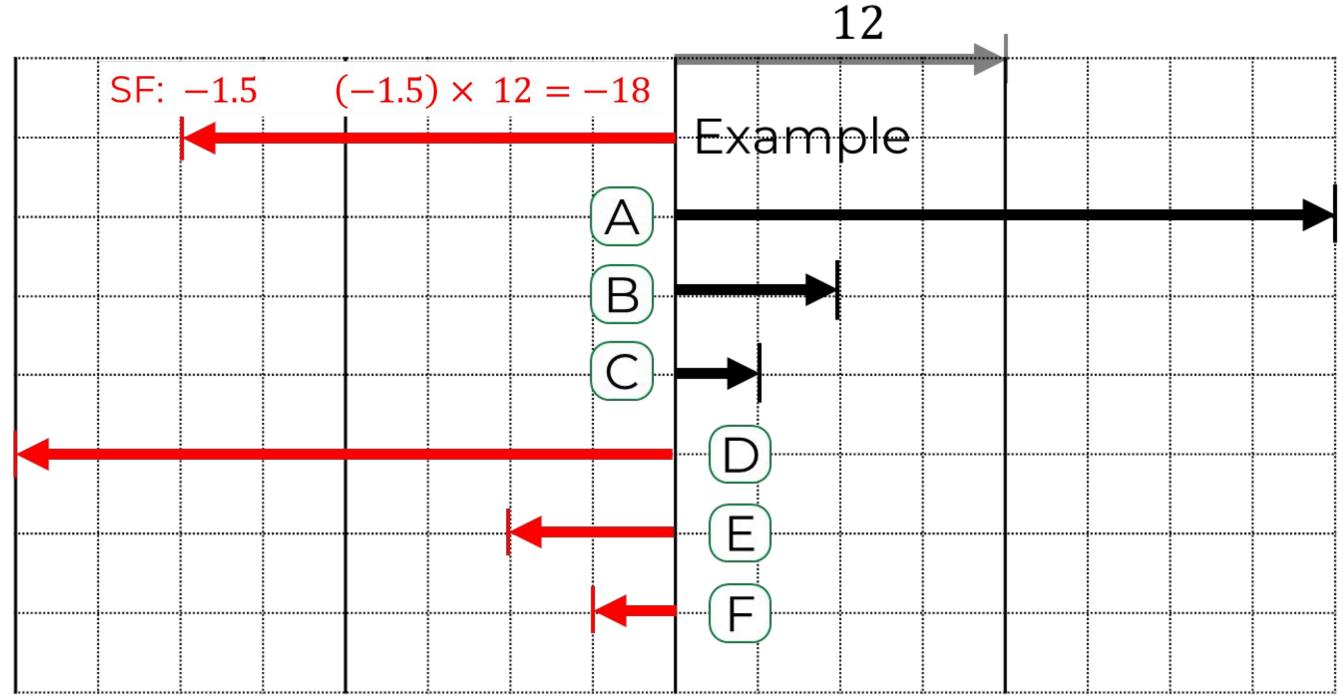
Each of these arrows can be connected to 12 using a scale factor.

#### For the example:

The scale factor is -1.5 and  $(-1.5) \times 12 = -18$ 

Describe a similar calculation for A-F and state the scale factor.

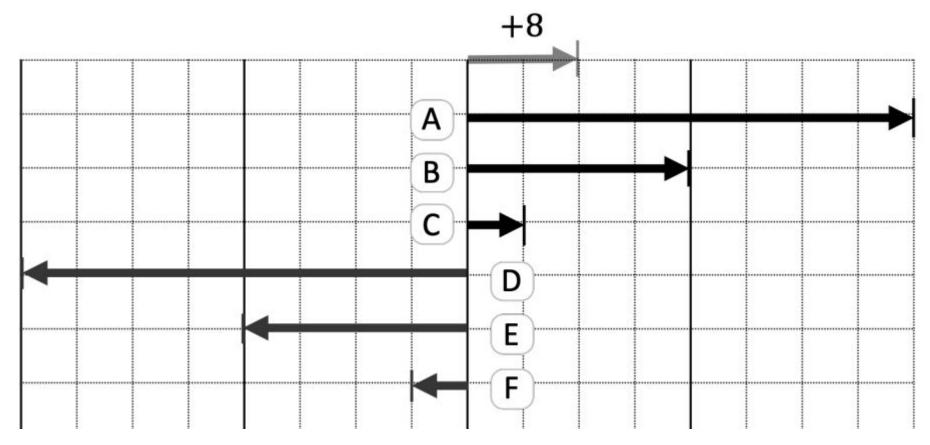
Return to the video once completed





## Independent task

For each representation complete the calculation: X[8] = 0 and state the scale factor.



- 2. Identify the equal pairs of calculations

- a)  $(-12) \times 6$  b)  $3 \times (-5)$  c)  $6 \times (-12)$  d)  $(-8) \times 4$

- e) (-16) x 2 f) (-3) x 5 g) (-12)  $x \frac{1}{2}$  h)  $(\frac{-1}{4})$ x 24

Return to the video once completed



### **Explore**

 $\boldsymbol{n}$  and  $\boldsymbol{m}$  are both positive integers and  $\boldsymbol{p}$  is a negative integer.

How many solutions can you find to the following:

a) 
$$n \times p = -24$$

**b)** 
$$p \times n \times m = -8$$

What happens to your answers above if n, m and p are allowed to be non-integers?

Return to the video once completed

