

# Activity 8 Assessment

## Relating Ratio and Proportion

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Writes a ratio in simplest form

The terms in the ratio 28:12 have 4 as their greatest common factor.

In simplest form,  $28:12 = 7:3$

Writes equivalent ratios for a two-term ratio

Equivalent ratios for 24:16 are 12:8, 6:4, 3:2, and 48:32

Uses equivalent ratios to identify an unknown number in a ratio table

Ratio Table	
3	2
6	4
9	a
12	8
b	12

Diagram showing multiplication factors:  $\times 3$  (from 3 to 6 and 2 to 4),  $\times 6$  (from 3 to 18 and 2 to 12), and  $\times 3$  (from 9 to 27 and a to 3a).

For a:  
 1<sup>st</sup> column:  $3 \times 3 = 9$   
 2<sup>nd</sup> column:  $2 \times 3 = a$   
 So,  $a = 6$

For b:  
 2<sup>nd</sup> column:  $2 \times 6 = 12$   
 1<sup>st</sup> column:  $3 \times 6 = b$   
 So,  $b = 18$

Uses a proportion to solve a ratio problem

For a:  
 $3:2 = 9:a$   
 Write each ratio as a fraction.

$$\frac{3}{2} = \frac{9}{a}$$

Diagram showing cross-multiplication:  $\times 3$  (from 3 to 9 and 2 to a), and  $\times 3$  (from 9 to 27 and a to 3a).

$$a = 2 \times 3$$

$$a = 6$$

### Observations/Documentation