5.2 RATIO TABLES

ESSENTIAL QUESTION: How can you find 2 ratios that describe the same relationship?

Write $\frac{6}{8}$ in simplest form. $\frac{3}{4}$ $\frac{6}{8}$ and $\frac{3}{4}$ are equivalent fractions.

Equivalent fractions means that they are equal. They are the same value.

The ratios 6:8 and 3:4 are equivalent ratios.

Two ratios that describe the same relationship are called equivalent ratios.

If you think of equivalent ratios as equivalent fractions the cross products are equal.

Ratios → 6:8 and 3:4 → $\frac{6}{8} = \frac{3}{4}$ (Equivalent fractions)

6·4 : 8·3

24 24

You can find and organize equivalent ratios in a ratio table.

check the cross products in your ratio tables. They should be equal

EXAMPLE 1 COMPLETING RATIO TABLES

Find the missing value(s) in each ratio table. Then write the equivalent ratios.

+1 +1

Pens	1	2	3
Pencils	3	6	9

+3 +3

1·6 : 2·3

6 6

1:3 2:6 3:9

×2 ×3

Dogs	4	8	24
Cats	6	12	36

×2 ×3

4:6 8:12 24:36

+4 +4

Plantains	4	8	12
Bananas	3	6	9

+3 +3

4:3 8:6 12:9

×2 ×4

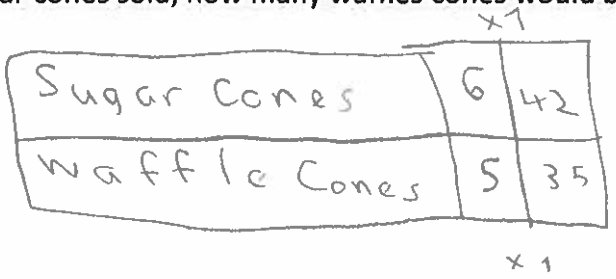
Euros	5	10	40
Dollars	4	8	32

×2 ×4

5:4 10:8 40:32

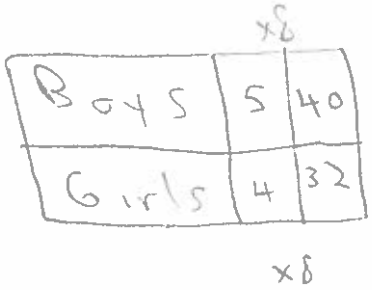
EXAMPLE 2 USING A RATIO TABLE

1)At an ice cream shop the ratio of sugar cones sold to waffle cones sold is 6 : 5. If there are 42 sugar cones sold, how many waffles cones would be sold?



35 waffle Cones were sold.

2)At summer camp the ratio of boys to girls was 5 : 4. If there were 40 boys, how many girls were there?



There were 32 boys at summer camp.