

Name _____ Date _____

Applications of Equivalent Ratios

WHEN WILL WE EVER USE THIS????

Example 1:

Annie reads 5 chapters in 2 hours. At this rate, how many chapters will she read in 6 hours?



STRATEGIES:

Using a Table:

Chapters Read	5	10	15
Time (hours)	2	4	6

Writing Equivalent Ratios:

Annie reads 15 chapters in 6 hours

$$\frac{5 \text{ chapters}}{2 \text{ hours}} = \frac{15 \text{ chapters}}{6 \text{ hours}}$$

(Handwritten notes: x3 above the first fraction, x3 below the second fraction, and x2 above the first fraction, x3 below the second fraction, and x3 above the second fraction, x2 below the first fraction)

Example 2: Determine the unknown value.

$$\frac{15}{\square} = \frac{45}{7}$$

is equivalent to

$$\frac{15}{7} = \frac{45}{\square}$$

(Handwritten notes: x3 above the second fraction, x3 below the second fraction)

$$\square = 21$$

Example 3:

Jordan made 6 out of every 10 baskets he attempted during basketball practice. If he attempted 25 baskets, how many did he make?



STRATEGIES:

Using a Table:

Made	3	6	15
Attempts	5	10	25

Handwritten annotations: Blue arrows show scaling from (3, 5) to (6, 10) by multiplying by 2, and from (6, 10) to (15, 25) by multiplying by 5. The value 15 in the 'Made' row is circled.

Writing Equivalent Ratios:

$$\frac{6 \text{ Made}}{10 \text{ Attempts}} = \frac{\boxed{15} \text{ Made}}{25 \text{ Attempts}}$$

Handwritten work shows the process of simplifying the first ratio to 3/5 and then multiplying both numerator and denominator of the second ratio by 5 to find the unknown value 15.

Example 4: Determine the unknown value.

$$\frac{15}{40} = \frac{\boxed{}}{32}$$

Using a Table:

Writing Equivalent Ratios:

