



### Grade 6 Warm Up

Date: \_\_\_\_\_

### Quiz NEXT day



1) Determine if the following ratios are equivalent

a)  $12:16$  and  $3:4$

Handwritten notes:  $\times 4$  (circled in red),  $\times 9$  (circled in red), "Same ✓ Equal" (in red).

b)  $7:15$  and  $14:32$

Handwritten notes:  $\times 2$  (in blue),  $\times 30$  (in green), "Not Equivalent" (in green).

2) Find the missing value for the equivalent ratios.

a)  $p:18 = 4:9$

Handwritten notes:  $\times 2$  (in red),  $\times 2$  (in blue),  $p=8$  (boxed).

b)  $56:40 = t:5$

Handwritten notes:  $\div 8$  (in red),  $\div 8$  (in green),  $t=7$  (boxed).

3) All the grade 6 class is going on a field trip. There has to be a 4:1 ratio of students to chaperons. If there are 32 grade 6 students then how many chaperones are needed?

Handwritten work:

$$\begin{array}{ccc} S & : & C \\ 4 & : & 1 \\ \times 8 \swarrow & & \searrow \times 8 \\ 32 & : & \boxed{8} \end{array}$$

8 chaperons are need for 32 grade 6 students.

Answers to worksheet

Sheet 1

**Equivalent Ratio**

A) Check for equivalency.

- 1) Are 2 : 3 and 10 : 15 equivalent?  Yes  No  
 $\begin{matrix} \times 5 & \times 5 \\ 2 & : & 3 \\ 10 & : & 15 \end{matrix}$
- 2) Are 8 : 12 and 4 : 5 equivalent?  Yes  No  
 $\begin{matrix} \div 2 & \div 2 \\ 8 & : & 12 \\ 4 & : & 6 \end{matrix}$
- 3) Are 21 : 6 and 7 : 2 equivalent?  Yes  No  
 $\begin{matrix} \div 3 & \div 3 \\ 21 & : & 6 \\ 7 & : & 2 \end{matrix}$
- 4) Are 6 : 9 and 24 : 32 equivalent?  Yes  No  
 $\begin{matrix} \times 4 & \times 4 \\ 6 & : & 9 \\ 24 & : & 36 \end{matrix}$

B) Find the unknown value in each problem.

- 1)  $5:6 = 15:m$   $m = \underline{18}$
- 2)  $k:5 = 7:1$   $k = \underline{35}$
- 3)  $6:16 = 3:p$   $p = \underline{8}$
- 4)  $36:63 = s:7$   $s = \underline{4}$
- 5)  $9:y = 27:15$   $y = \underline{5}$
- 6)  $u:3 = 2:6$   $u = \underline{1}$

C) An urn has four different color balls. The ratio of blue balls to red balls is 3:7 and the ratio of green balls to yellow balls is 9:21. Are the ratios of blue balls to red balls and green balls to yellow balls equivalent?

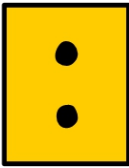
green : yellow  
 9:21  
 $\begin{matrix} \div 3 & \div 3 \\ 3 & : & 7 \end{matrix}$

blue : red  
 3 : 7



**Equivalent**

# If more is needed



## EQUIVALENT RATIOS

Fill in the blanks to make equivalent ratios.

Name \_\_\_\_\_

Date \_\_\_\_\_

$$7 : 3 = \underline{28} : 12$$

*(Handwritten: x4)*

$$\underline{42} : 12 = 7 : \underline{2}$$

*(Handwritten: x6)*

$$6 : 7 = 36 : \underline{42}$$

*(Handwritten: x6)*

$$1 : 4 = 7 : \underline{28}$$

*(Handwritten: x7)*

$$72 : 9 = 8 : \underline{1}$$

*(Handwritten: ÷9)*

$$11 : \underline{7} = 22 : 14$$

*(Handwritten: ÷2)*

$$\underline{108} : 99 = 12 : 11$$

*(Handwritten: x9)*

$$5 : 6 = 40 : \underline{48}$$

*(Handwritten: x8)*

$$\underline{27} : 72 = 3 : 8$$

*(Handwritten: x9)*

$$1 : 7 = \underline{5} : 35$$

*(Handwritten: x5)*

$$21 : 7 = 3 : \underline{1}$$

*(Handwritten: ÷7)*

$$1 : \underline{6} = 2 : 12$$

*(Handwritten: ÷2)*

$$8 : \underline{72} = 1 : 9$$

*(Handwritten: x8)*

$$\underline{25} : 15 = 5 : 3$$

*(Handwritten: x5)*

$$4 : 7 = 40 : \underline{70}$$

*(Handwritten: x10)*

$$80 : \underline{8} = 10 : 1$$

*(Handwritten: x8)*

$$\underline{1} : 5 = 6 : 30$$

*(Handwritten: x6)*

$$30 : 54 = 5 : \underline{9}$$

*(Handwritten: ÷6)*

$$\underline{5} : 11 = 15 : 33$$

*(Handwritten: ÷3)*

$$\underline{20} : 28 = 5 : \underline{7}$$

*(Handwritten: x4)*

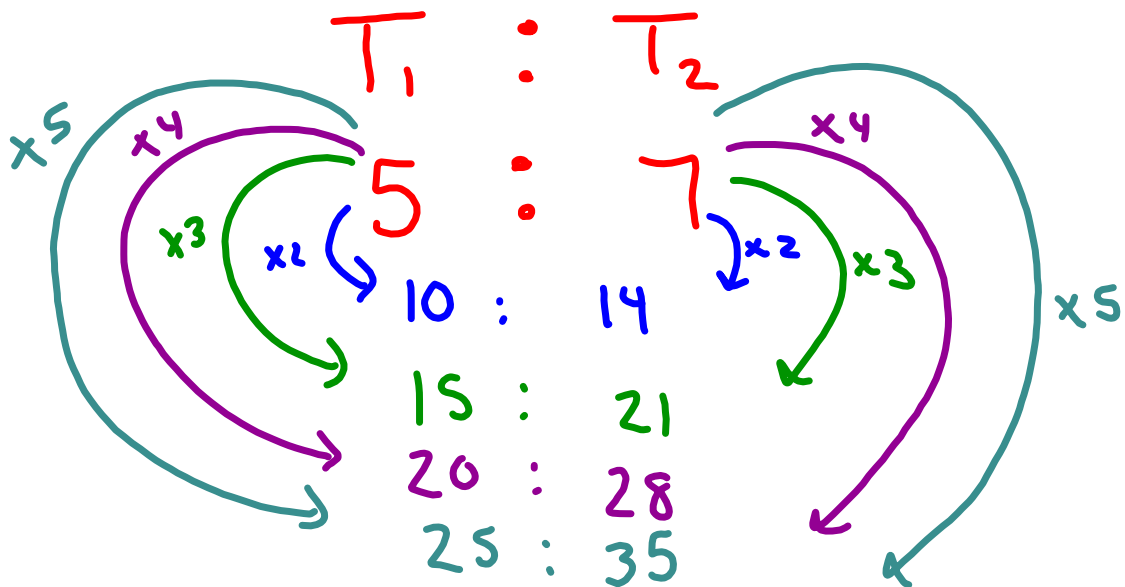
## Similar to the Quiz questions

1) Write an equivalent ratio with 40 as one of the terms

$$\begin{array}{l}
 \text{a) } 5 : 10 \\
 \times 8 \downarrow \quad \times 8 \\
 40 : 80
 \end{array}
 \left\{
 \begin{array}{l}
 5 : 10 \\
 \times 4 \downarrow \quad \times 4 \\
 20 : 40
 \end{array}
 \right.
 \quad
 \begin{array}{l}
 \text{b) } 8 : 7 \\
 \times 5 \downarrow \quad \downarrow \times 5 \\
 40 : 35
 \end{array}$$

more than 1

2) List all the ratios that are equivalent to 5:7 and have the second term that is less than 42.



## Quiz outline

- #1) Given a picture determine ratios of shapes
- #2) write equivalent ratios when provided with a ratio
- #3) Reduce Ratios
- #4) Word problem with ratios (similar to the warm ups & HW)

## Extra Practice 5

Extra Practice 5 Equivalent Ratio.pdf

#1 b c

#2 ab

#3

#4

#6 give 2 examples

#7 ab

1a)  $2:2$   
 $\div 2 \quad \div 2$   
 $1:1$

$2:2$   
 $\times 2 \quad \times 2$   
 $4:4$

## Attachments

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Hundreds chart.jpg

Extra Practice 5 Equivalent Ratio.pdf