

6.10 Multi-Part and Linked Ratios

Chapter 6: Ratios, Rates, and Proportional Reasoning

Name: _____

Date: _____

Class/Period: _____

Problem 6.147 If $A : B : C = 2 : 3 : 7$ and total is 72, find C .

Problem 6.150 Combine cats:dogs = 4 : 7 and dogs:birds = 14 : 9.

Problem 6.148 If red:blue:yellow = 4 : 8 : 14, simplify.

Problem 6.151 If $A : B : C = 5 : 2 : 3$ and $B = 18$, find total.

Problem 6.149 Combine $A : B = 2 : 5$ and $B : C = 3 : 4$.

Problem 6.152 If $A : B : C = 1 : 4 : 5$ and $C - A = 36$, find all parts.

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Problem 6.153 A ratio has four parts $2 : 3 : 4 : 6$. What fraction is the third category?

Problem 6.156 Combine $p : q = 5 : 6$ and $q : r = 9 : 2$.

Problem 6.154 Find the fraction of the whole represented by the first term of $1 : 2 : 2$.

Problem 6.157 Explain why $2 : 3$ and $4 : 5$ cannot directly form $2 : 3 : 5$.

Problem 6.155 Combine $x : y = 3 : 8$ and $y : z = 4 : 7$.

Problem 6.158 Create linked ratios whose final ratio is $6 : 10 : 15$.

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Problem 6.159 A sports league has soccer:basketball = 5 : 4 and 162 athletes. Basketball players have boys:girls = 7 : 2. Find girl basketball players.

Problem 6.161 Fuji:Gala apple trees = 3 : 5. Peach:all apple trees = 2 : 7. Find peach:Fuji:Gala.

Problem 6.160 Fruit cups use grapes:apples:berries = 4 : 3 : 2 with 81 cups total. Berries are blueberries:strawberries = 5 : 4. Find strawberries.

Problem 6.162 A class has red shirts:blue shirts:white shirts = 3 : 5 : 4. Half of the blue-shirt group wears hats. Find hat wearers as a fraction of the class.