

Ratios Marking Instructions

1. **5 : 2**

*Working: Tall = 90 Dwarf = 36
common denominator (number which divides into both) is 6*

$$90/6 = 15 \text{ and } 36/6 = 6$$

$$Tall = 15 \quad Dwarf = 6$$

common denominator is 3

$$15/3 = 5 \text{ and } 6/3 = 2$$

or

18 is common denominator for 90 and 36

$$90/18 = 5 \text{ and } 36/18 = 2$$

2. **11:7**

*Working: Males (with coronary heart disease) = 165
Females(with coronary heart disease) = 105
common denominator is 15*

$$165/15 = 11 \text{ and } 105/15 = 7$$

or

common denominator of 5

$$165/5 = 33 \text{ and } 105/5 = 21$$

then common denominator is 3

$$33/3 = 11 \text{ and } 21/3 = 7$$

3. **13:5**

*Working: 90 students in total
25 with hitchhiker's thumb
Number with straight thumb = $90 - 25 = 65$
65 straight : 25 hitchhikers
common denominator is 5
 $65/5 = 13$ and $25/5 = 5$*

4. **1 : 3**

*Working: Tyrosine = 1.8 and Serine = 5.4
common denominator is 1.8
 $1.8/1.8 = 1$ and $5.4/1.8 = 3$*

5. **5:3**

*Working: From 1000 people, 625 left thumb on top so number with
right thumb on top = $1000 - 625 = 375$.
Left = 625 and Right = 375
common denominator is 125
 $625/125 = 5$ and $375/125 = 3$
or
common denominator is 25
 $625/25 = 25$ and $375/25 = 15$
then common denominator is 5
 $25/5 = 5$ and $15/5 = 3$
or
common denominator is 5
 $625/5 = 125$ and $375/5 = 75$
then common denominator is 5
 $125/5 = 25$ and $75/5 = 15$
then common denominator is 5
 $25/5 = 5$ and $15/5 = 3$*

6. **2 : 5**

*Working: rest = 260 during exercise = 650
common denominator is 130
 $260/130 = 2$ and $650/130 = 5$
or
common denominator is 10
 $260/10 = 26$ and $650/10 = 65$
then common denominator is 13
 $26/13 = 2$ and $65/13 = 5$*

7. 3 : 2

Working: Pink = 24 White = 16

common denominator is 8

$24/8 = 3$ and $16/8 = 2$

or

common denominator is 4

$24/4 = 6$ and $16/4 = 4$

then common denominator is 2

$6/2 = 3$ and $4/2 = 2$