## Ratio

1. Given $a: b=3: 4$, find value of $(a-b):(a+b)$
2.Given $a: b=\frac{1}{2}: \frac{2}{3}, c: b=0.2: 0.5$, find $a: b: c$
3.If $7(5 x-y)=5(2 x+3 y)$, find $x: y$
4.Simplify $1 \frac{2}{3}: 1 \frac{1}{4}$
5.Given $\mathrm{P}: \mathrm{Q}=3: 4, \mathrm{Q}: \mathrm{R}=6: 5$, find $\mathrm{P}: \mathrm{R}$

6 . Given $a: b=5: 6, b: c=9: 8$, find $a: c$
7.Given $\mathrm{a}: \mathrm{b}=\frac{1}{2}: \frac{1}{3}, \mathrm{~b}: \mathrm{c}=\frac{1}{4}: \frac{1}{5}$, find $\mathrm{a}: \mathrm{b}: \mathrm{c}$
8.If RM 234 are divided to three portion $\frac{1}{2}: \frac{1}{3}: \frac{1}{4}$, find the difference between the most and the least
9.Given $3 \mathrm{a}=2 \mathrm{~b}, \mathrm{~b}: c=5: 2$, find $\mathrm{a}: \mathrm{c}$

10 .Find the ratio of $15 \mathrm{~m} / \mathrm{s}$ and $12 \mathrm{~km} / \mathrm{h}$
11.Given $3(x+y)=4(3 x-2 y)$, find $x: y$
12. Given $a: b=2: 3, b: c=4: 5$, find $2 a: 3 b: 4 c$
13. Given $a: b=7: 3, a-b=8$, find $a+b$
14.Given $a: b=2: 9, b: c=12: 7$, find $a: b: c$
15.Simplify $1 \frac{1}{4}: 1 \frac{2}{3}$
16. Given $A: B=3: 2, B: C=4: 3$, find $A: B: C$
17.Simplify $3 \frac{1}{3}: 1 \frac{3}{7}$
18. Given $\mathrm{A}: \mathrm{B}=3: 4, \mathrm{~B}: \mathrm{C}=7: 9$, find $\mathrm{A}: \mathrm{B}: \mathrm{C}$
19.If $\frac{a}{b}=\frac{3}{5}$, find $\frac{a+3 b}{3 a-b}$
20.Given $\mathrm{x}: \mathrm{y}: \mathrm{z}=1: \frac{3}{2}: \frac{5}{2}$, find $\frac{x}{y}: \frac{y}{z}$
21. Given $\mathrm{a}: \mathrm{b}=7: 8, \mathrm{~b}: \mathrm{c}=3: 1$, find $\mathrm{a}: \mathrm{b}: \mathrm{c}$
22. Given $\frac{4 x-3 y}{2}=\frac{x+4 y}{3}$, if $\mathrm{y} \neq 0$, find $\mathrm{x}: \mathrm{y}$
23. Given $\frac{3}{3 x-2 y}=\frac{4}{x+y}$, find $\mathrm{x}: \mathrm{y}$
24.The ratio of train $A$ and $B$ is $4: 5$, if speed of train $A$ is $20 \mathrm{~ms}^{-1}$, find the speed of train B
25. Given $(a+b):(a-b)=4: 1$ and HCF of $a$ and $b$ is 65 , find $a$
26. The ratio of a map is 1:25000 per meter. Find the length of real route for 3 cm from the map in km .
27. In a bottle factory, in producing 100 pieces will have 20 defects, if a factory accepts an order for 8000 bottles, how many pieces they should produce?
28. In a project, 30 workers are required to complete the job by 15 days, how many days are needed to complete the job for 10 workers?
29.There are some food, estimate 5 person can finish in 36 days, if 4 person joined in , how many days can finish the food?
30.In a project, 120 workers are needed to complete the job by 80 days, if the company wish to complete the work 30 days earlier, how many workers they need?
31. Given $\mathrm{AB}: \mathrm{BC}=4: 3$, if length of $\mathrm{AB}=28 \mathrm{~cm}$, find length of AC
32. If RM 93 are divided to three portions 15:10:6, find the least portion
33. If 3424 are divided to three portions $2 \frac{1}{2}: \frac{2}{5}: \frac{2}{3}$, find the last portion
34. There are cash RM 380 dividing to $\mathrm{P}, \mathrm{Q}$ and R three person with ratio $\frac{1}{3}: \frac{3}{4}: \frac{1}{2}$, find how much can R gets.
34. Given $a: b: c=5: 2: 3$, where $a+b+c=300$, find $(a+1):(b+1):(c+1)=$

35 .A rope with 126 km are cut into three portions with ratio $1: 2: 3$, find the longest length it cuts.

