Comparing Quantities: Worksheet -3

1. If A = 3B = 5 C, then A : B : C = _ _ _ _ _ _ _ _ _ _

2. If $\frac{a}{b} = \frac{c}{d} = \frac{e}{f} = \frac{1}{3}$, then $\frac{5a + 3c + 7e}{5b + 3d + 7f}$ = _ _ _ _ _ _ _ _ _ _ _

3. What number must be added to each term of the ratio 7 : 5 so that it becomes 4 [ ]

   [A] 1 [B]. 2 [C] -13 [D]. 4

4. In a class there are 225 students. Which of the following cannot be the ratio of the number of students passed to the number of students failed. [ ]

   [A] 2 : 3 [B] 7 : 8 [C] 5 : 4 [D] 3 : 4

5. A sum of Rs 4680 was divided among parthu, kunti and Arun in the ratio of $\frac{1}{2} : \frac{1}{3} : \frac{1}{4}$. Find the share of Parthu. (in Rs) [ ]

   [A] 1440 [B] 1080 [C] 2160 [D] None

6. If $\frac{a}{b-a} = \frac{7}{8}$, find the value of $\frac{a}{b}$. [ ]

   [A] 7 [B] $\frac{15}{7}$ [C] $\frac{7}{15}$ [D] $\frac{-15}{7}$

7. If $\frac{X+Y}{X+Y+Z} = \frac{Y+Z}{X+Y+Z} = \frac{X+Z}{X+Y+Z} = P$, then which of the following can be the value of P? [ ]

   [A] $\frac{1}{2}$ [B] 2 [C] $\frac{2}{3}$ [D] 3

8. One day, the ratio of the number of first class and second class passengers who travelled were in the ratio 1 : 30. the ratio of the first and second class fares is 3 : 1. the total amount collected from the passengers that day was Rs. 66000. find the amount collected from the first class passengers (in Rs.). [ ]

[A] 3000 [B] 6000 [C] 9000 [D] 12000

9. If $\frac{x}{2}, \frac{7}{x}, \frac{3x}{2}$ and $\frac{7}{3}$ are in proportion, then the value of x is [ ]

[A] 3 [B] 6 [C] 9 [D] 10

10. If P : Q : R = 2 : 3 : 4 and $P^2 + Q^2 + R^2 = 11600$, then find (P +Q+R) [ ]

[A] 15 [B] 16 [C] 18 [D] 20