



ST. LAWRENCE HIGH SCHOOL

A Jesuit Christian Minority Institution



Sub: Arithmetic
Duration: 40 Min

Class: 7
Worksheet Solution 05
Time and Work

Date: 21.11.20
Full Marks: 15

Choose the correct options:

1. A alone can do a piece of work in 10 days and B alone can do it in 15 days. In how many days will A and B together do the same work?

(a) 5

(b) 6

(c) 8

(d) 9

2. Jack can finish a work in 10 days and Tom can do the same work in half the time taken by A. Then, working together, what part of the same work they can finish in a day?

(a) $\frac{3}{10}$

(b) $\frac{1}{9}$

(c) $\frac{2}{5}$

(d) $\frac{2}{7}$

3. A man can do a piece of work in 5 days, but with the help of his son, he can do it in 3 days. In what time can the son do it alone?

(a) $6\frac{1}{2}$ days

(b) 7 days

(c) $7\frac{1}{2}$ days

(d) 8 days

4. White can do a job in 15 days and Lee can do the same job in 9 days. With the help of Scott, they did the job in 3 days only. Then, Scott alone can do the job in _____

(a) $6\frac{1}{5}$ days

(b) $6\frac{2}{5}$ days

(c) $6\frac{3}{7}$ days

(d) 10 days

5. P can do $\frac{1}{4}$ of a work in 10 days; Q can do 40% of the work in 15 days and R can do $\frac{1}{3}$ of the work in 13 days. Who will complete the work first?

(a) P

(b) Q

(c) R

(d) P and R both

6. A and B are working on an assignment. A takes 6 hours to type 32 pages on a computer while B takes 5 hours to type 40 pages. How much time will they take, working together on two different computers, to type an assignment of 110 pages?

(a) 7 hrs 30 min

(b) 8 hrs

(c) 8 hrs and 15 min

(d) 8 hrs 25 min

7. Smith and Thomas can do a piece of work in 72 days; Thomas and Clark can do it in 120 days; Smith and Clark can do it in 90 days. In what time can Smith, Thomas and Clark do it, working together?

(a) 60 days

(b) 66 days

(c) 75 days

(d) 80 days

8. Clark can do a work in 9 days and Nelson in 15 days. If they work on it together for 5 days then the fraction of the work that is left, is _____ .

(a) $1/15$

(b) $1/10$

(c) $11/15$

(d) $1/9$

9. A can do $1/3$ of a work in 5 days and B can do $2/5$ of the work in 10 days. In how many days can both A and B together do the work?

(a) $7\frac{3}{4}$ days

(b) $8\frac{4}{5}$ days

(c) $9\frac{3}{8}$ days

(d) 10 days

10. A pipe can fill a water tank in 8 hours. Due to a leak in the bottom of the water tank, it is filled in 10 hours. If the water tank is full, how much time will the leak take to empty it?

(a) 36 hours

(b) 42 hours

(c) 45 hours

(d) 40 hours

11. A tap can fill a oil tank in 15 hours. After half the oil tank is filled, nine more similar taps are opened. What is the total time taken to fill the oil tank completely?

(a) 3 hrs 15 min

(b) 3 hrs 45 min

(c) 4 hrs

(d) 4 hrs 15 min

12. Two pipes can fill a tank in 10 hours and 12 hours respectively, while a third pipe empties the full tank in 20 hours. If all the three pipes operate simultaneously, in how much time will the tank be full?

(a) 7 hrs 15 min

(b) 7 hrs 30 min

(c) 7 hrs 45 min

(d) 8 hrs

13. One tap can fill a water tank four times as fast as another tap. If together the two taps can fill the water tank in 30 minutes then the slower tap alone will be able to fill the water tank in _____ .

(a) 81 min

(b) 108 min

(c) 150 min

(d) 192 min

14. Raj can build a house alone in 16 days but Suraj alone can build it in 12 days. Raj and Suraj work on alternate days. If Raj works on first day, the house will be built in how many days?

- (a) 12.5 days
- (b) $13\frac{3}{4}$ days**
- (c) $\frac{48}{7}$ days
- (d) $\frac{24}{7}$ days

15. A can complete a work in 12 days and B can complete in 8 days. A works for 8 hours every day while B works for 10 hours every day. If A and B together start working 8 hours per day, in how many days will they complete the work?

- (a) 8 days
- (b) $\frac{60}{11}$ days**
- (c) $\frac{39}{12}$ days
- (d) $\frac{15}{8}$ days