EduSahara[™] Learning Center Assignment

Grade : Class VIII, SSC

Chapter : Direct and Inverse Proportions
Name : Working Capacity Problems

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A can do a work in $\, 8 \,$ days and $\, B \,$ can do the same work in $\, 2 \,$ days .

If they work together, in how much time is the work completed?

- (i) $1\frac{3}{7}$ days (ii) 2 days (iii) $1\frac{3}{5}$ days (iv) $1\frac{1}{5}$ days
- A can do a work in 2 days . With the help of B, A can do the same work in
- $1\frac{5}{9}$ days . In how many days can B alone do the work?
 - (i) 10 days (ii) 6 days (iii) 7 days (iv) 8 days (v) 4 days

A and B can do a work in 5 days, B and C can do in 9 days

3. and C and A can do in 5 days. If all three work together,

in how many days will the work be completed?

(i) $3\frac{19}{23}$ days (ii) $3\frac{21}{25}$ days (iii) 4 days (iv) $3\frac{21}{23}$ days

A and B can do a piece of work in 11 days and 16 days respectively.

4. They work together for 1 day and then B leaves.

In how many days the whole work is completed?

- (i) $10\frac{5}{18}$ days (ii) $10\frac{3}{16}$ days (iii) $10\frac{5}{14}$ days (iv) $10\frac{7}{16}$ days (v) $10\frac{5}{16}$ days
- 9 men take 4 days to complete a work.

How much work is done by one man in one day?

- (i) $\frac{1}{4}$ (ii) $\frac{1}{9}$ (iii) $(\frac{-1}{36})$ (iv) $\frac{1}{12}$ (v) $\frac{1}{36}$
- 5 men can do a work in 14 days working 7 hours a day.

In how many days can 16 men do the same work, working 8 hours a day?

(i)
$$3\frac{53}{64}$$
 days (ii) $3\frac{55}{64}$ days (iii) $3\frac{53}{62}$ days (iv) $3\frac{53}{66}$ days (v) $3\frac{51}{64}$ days

5 men and 2 women can do a piece of work in 15 days.

- 7. 3 men and 25 women can do the same work in 10 days.
 In how many days can 5 men and 2 women complete the same work?
 - (i) 16 days (ii) 17 days (iii) 15 days (iv) 13 days (v) 14 days

6 skilled men can do a work in 7 days .

- 8. 6 unskilled men can do the same work in 9 days .

 In how many days can 5 skilled and 3 unskilled men do the same work?
 - (i) $5\frac{8}{11}$ days (ii) $5\frac{8}{9}$ days (iii) $5\frac{8}{13}$ days (iv) $5\frac{6}{11}$ days (v) $5\frac{10}{11}$ days
 - A, B and C together can do a work in $\frac{6}{7}$ days .
- 9. If A and C can do the work in 3 days and 3 days respectively, in how many days can B alone do the work?
 - (i) -1 days (ii) 3 days (iii) 4 days (iv) 2 days (v) 1 day

A certain number of men can do a work in 12 days .

10. If there were 9 men less, it would take 2 days more to complete the work.

How many men are required to complete the work in 42 days?

A and B can do a work in 5 days and 6 days respectively.

- 11. They together undertook to do a piece of work for ₹5500.00 What is the share of B?
 - (i) ₹2500.00 (ii) ₹2499.00 (iii) ₹2998.00 (iv) ₹2501.00 (v) ₹3000.00

A and B can do a work in 16 days and 27 days respectively.

- 12. If they work on alternate days and A begins the work, in how many days can it be completed?
 - (i) 24 days (ii) 20 days (iii) 22 days (iv) 21 days (v) 19 days

Person P is five times as good a workman as Person Q.

13. They can do a work together in $2\frac{1}{2}$ days.

In how many days Q alone can do the work?

(i) 18 days (ii) 14 days (iii) 13 days (iv) 15 days (v) 16 days

P and Q can do together a piece of work in $3\frac{11}{15}$ days .

After they have worked together for $\, 2 \,$ days , P stops. $\, 14. \,$

Q completes the remaining work in $3\frac{1}{4}$ days.

In how many days can Q alone do the work?

(i) 8 days (ii) 5 days (iii) 7 days (iv) 9 days (v) 6 days

A can do a piece of work in 12 hrs and B in 10 hrs.

A does the work for 6 hrs before B join A to work together.

15. Again after 2 hrs C joins both A and B to complete the work in $\frac{56}{137}$ hrs .

In how much time C alone can do the work?

(i) 7 hrs (ii) 6 hrs (iii) 4 hrs (iv) 8 hrs (v) 10 hrs

A, B, C, D, and E can do a piece of work in

16. 10 hrs , 6 hrs , 13 hrs , 12 hrs and 14 hrs respectively.

Who has the greatest capacity to do work?

(i) D (ii) A (iii) C (iv) B (v) E

A, B, C, D, and E can do a piece of work in

 $17.\ \ 15$ days , $\,7$ days , $\,6$ days , $\,14$ days and $\,11$ days respectively.

Who has the greatest capacity to do work?

(i) E (ii) B (iii) A (iv) D (v) C

A and B can do a work in $4\frac{8}{19}$ hrs , B and C can do it in $4\frac{8}{19}$ hrs

18. and C and A can do it in $3\frac{1}{2}$ hrs . In how much time can each of them do it separately?

- (i) (7 hrs, 12 hrs, 7 hrs) (ii) (7 hrs, 12 hrs, 8 hrs)
- (iii) (8 hrs , 13 hrs , 7 hrs) (iv) (8 hrs , 12 hrs , 7 hrs)
- (v) (7 hrs, 13 hrs, 7 hrs)

A and B can do a work in $3\frac{1}{13}$ days , B and C can do it in $4\frac{4}{9}$ days

- 19. and C and A can do it in $3\frac{1}{3}$ days. In how much time can each of them do it separately?
 - (i) (5 days , 8 days , 11 days) (ii) (6 days , 9 days , 10 days)
 - (iii) (5 days , 9 days , 10 days) (iv) (6 days , 8 days , 10 days)
 - (v) (5 days , 8 days , 10 days)
- A can do a piece of work in 5 hrs , B can do the work in 8 hrs 20. and C in 10 hrs respectively. In how much time can they do it together?
 - (i) $2\frac{2}{5}$ hrs (ii) $2\frac{4}{17}$ hrs (iii) $2\frac{6}{17}$ hrs (iv) $2\frac{6}{19}$ hrs (v) $2\frac{8}{17}$ hrs
- A can do a piece of work in 10 days , B can do the work in 10 days 21.
 and C in 14 days respectively. In how much time can they do it together?
 - (i) $3\frac{13}{17}$ days (ii) $3\frac{15}{19}$ days (iii) $3\frac{13}{21}$ days (iv) $3\frac{13}{19}$ days (v) $3\frac{11}{19}$ days

A and B together can do a piece of work in $7\frac{7}{29}$ hrs.

- They work together for 3 hrs and then A leaves. 22.
 - B completes the remaining work in $8\frac{11}{14}$ hrs.

In how much time can each of them do the work seperately?

- (i) (14 hrs , 14 hrs) (ii) (13 hrs , 15 hrs) (iii) (14 hrs , 16 hrs)
- (iv) (15 hrs , 15 hrs) (v) (14 hrs , 15 hrs)

A and B together can do a piece of work in $3\frac{11}{18}$ days.

- They work together for 1 day and then A leaves. 23.
 - B completes the remaining work in $3\frac{8}{13}$ days.

In how much time can each of them do the work seperately?

- (i) (13 days , 5 days) (ii) (14 days , 5 days) (iii) (12 days , 5 days)
- (iv) (13 days , 6 days) (v) (13 days , 4 days)

A can do $\frac{8}{12}$ of a work in $7\frac{1}{3}$ hrs.

He works for $\, 5 \,$ hrs when B joins him. $\, 24. \,$

They work together and complete the work in $2\frac{2}{17}$ hrs .

In how much time, B alone can do the work?

(i) 9 hrs (ii) 5 hrs (iii) 6 hrs (iv) 4 hrs (v) 7 hrs

A can do $\frac{8}{15}$ of a work in $2\frac{2}{3}$ days.

He works for 2 days when B joins him.

They work together and complete the work in $2\frac{1}{4}$ days.

In how much time, B alone can do the work?

(i) 15 days (ii) 16 days (iii) 18 days (iv) 14 days (v) 13 days

A can construct $\frac{4}{7}$ of a wall in 4 hrs.

B can construct $\frac{3}{6}$ of the wall in 3 hrs.

26. C can construct $\frac{2}{8}$ of the wall in $1\frac{3}{4}$ hrs.

If all three work together, in how much time will they construct $\frac{1}{7}$ of the wall?

(i) $\frac{4}{19}$ hrs (ii) $\frac{6}{17}$ hrs (iii) $\frac{6}{19}$ hrs (iv) $\frac{2}{7}$ hrs (v) $\frac{8}{19}$ hrs

A can construct $\frac{3}{7}$ of a wall in $2\frac{4}{7}$ days.

B can construct $\frac{1}{7}$ of the wall in $\frac{5}{7}$ days.

27. C can construct $\frac{4}{6}$ of the wall in 6 days .

If all three work together, in how much time will they construct $\frac{2}{8}$ of the wall?

(i) $\frac{45}{88}$ days (ii) $\frac{45}{86}$ days (iii) $\frac{1}{2}$ days (iv) $\frac{47}{86}$ days (v) $\frac{15}{28}$ days

A, B and C can together do a piece of work in $2\frac{20}{53}$ hrs .

B and C can do it in $3\frac{3}{13}$ hrs .

C alone can do it in 7 hrs.

In how much time A and C can do the work together?

(i)
$$4\frac{1}{16}$$
 hrs (ii) $3\frac{13}{16}$ hrs (iii) $3\frac{5}{6}$ hrs (iv) $4\frac{1}{14}$ hrs (v) $3\frac{15}{16}$ hrs

A, B and C can together do a piece of work in $2\frac{20}{53}$ days.

B and C can do it in $3\frac{15}{16}$ days.

C alone can do it in 7 days.

In how much time A and C can do the work together?

(i)
$$3\frac{3}{13}$$
 days (ii) $3\frac{1}{13}$ days (iii) $3\frac{1}{5}$ days (iv) $3\frac{3}{11}$ days (v) $3\frac{5}{13}$ days

A sum of ₹2899.00 will be given to do a work.

A and B can do it in $3\frac{15}{16}$ hrs.

30. B and C can do in $4\frac{14}{19}$ hrs . C and A can do in $4\frac{2}{17}$ hrs .

How much A, B and C respectively will get if all three work together?

- (i) (₹1170,₹910 ,₹819)
- (ii) (₹1170,₹819 ,₹910)
- (iii) (₹819 ,₹910 ,₹1170)
- (iv) (₹910 ,₹819 ,₹1170)
- (v) (₹819 ,₹1170,₹910)

A sum of ₹476.00 will be given to do a work.

A and B can do it in $4\frac{14}{19}$ days.

31. B and C can do in $3\frac{3}{5}$ days . C and A can do in $3\frac{3}{4}$ days .

How much A, B and C respectively will get if all three work together?

- (i) (₹140,₹210,₹126)
- (ii) (₹126,₹140,₹210)
- (iii) (₹210,₹126,₹140)
- (iv) (₹126,₹210,₹140)
- (v) (₹210,₹140,₹126)

Assignment Key

- 1) (iii)
- 2) (iii)
- 3) (iv)
- 4) (v)
- 5) (v)
- 6) (i)
- 7) (iii)
- 8) (i)
- 9) (iv)
- 10) (iii)
- 11) (i)
- 12) (iv)
- 13) (iv)
- 14) (iii)
- 15) (i)
- 16) (iv)
- 17) (v)
- 18) (i)
- 19) (v)
- 20) (iii)
- 21) (iv)
- 22) (v)
- 23) (i)
- 24) (iii)
- 25) (i)
- 26) (iii)
- 27) (ii)
- 28) (v)
- 29) (i)
- 30) (i)
- 31) (ii)