Name : Unitary Method Problems

Chapter: Unitary Method

Grade: ICSE Grade VII

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1.	If 6 eggs	cost ₹36,	how	much	will	38	eggs	cost?	
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- (i) ₹220 (ii) ₹228 (iii) ₹216 (iv) ₹251 (v) ₹234
- 2. If 10 brushes cost ₹70, how many brushes can be purchased with ₹231?
 - (i) 30 (ii) 32 (iii) 34 (iv) 36 (v) 33
- 3. If 5 I of water costs ₹50, how much will 34 I cost?
 - (i) ₹353 (ii) ₹340 (iii) ₹367 (iv) ₹338 (v) ₹326
- 4. If 6 I of milk costs ₹72, how much of milk costs ₹468?
 - (i) 39 | (ii) 44 | (iii) 42 | (iv) 34 | (v) 36 |
- 5. If 18 men can make 108 chairs in a day, how many chairs are made by 25 men in a day?
 - (i) 149 (ii) 147 (iii) 153 (iv) 151 (v) 150
- 6. If 20 men can make 80 birthday cakes in a day, how many men are needed to make 64 birthday cakes in a day?
 - (i) 16 (ii) 15 (iii) 19 (iv) 13 (v) 17
- 7. If Raju can read 340 pages in 17 hr, how many pages can he read in 16 hr?
 - (i) 317 (ii) 323 (iii) 319 (iv) 320 (v) 321
- 8. If Mahender can read 224 pages in 16 hr, he can read 140 pages in how many hours?
 - (i) 13 hr (ii) 10 hr (iii) 7 hr (iv) 15 hr (v) 5 hr
- 9. If Chandan can read 51 pages in a 187 pages book in 3 hr, how much more time will it take to complete the book?
 - (i) 9 hr (ii) 7 hr (iii) 10 hr (iv) 6 hr (v) 8 hr
- 10. If Venkat can make 72 pastries in 6 min, in how much time can he complete an order of 444 pastries?
 - (i) 32 min (ii) 42 min (iii) 37 min (iv) 40 min (v) 34 min
- 11. If 50 men can do a piece of work in 90 days, how many men can do the same work in 30 days?
 - (i) 148 (ii) 151 (iii) 150 (iv) 149 (v) 152
- 12. If 55 men can do a piece of work in 84 days, 154 men can do the same work in how many days?
 - (i) 25 days (ii) 33 days (iii) 35 days (iv) 27 days (v) 30 days
- 13. If 17 men can build $\frac{1}{5}$ of a wall in 29 days,

in how much more time is the wall completely built?

(i) 132 days (ii) 99 days (iii) 116 days (iv) 108 days (v) 120 days

A vehicle can cover certain distance in 60 min, running at a speed of 54 kmph. At what speed must the verture to cover the same distance in 108 min? (i) 35 kmph (ii) 33 kmph (iii) 27 kmph (iv) 25 kmph (v) 30 kmph	ehicle
A vehicle can cover certain distance in 48 min, running at a speed of 132 kmph. In how many minutes vehicle covers the same distance running at a speed of 66 kmph? (i) 101 min (ii) 91 min (iii) 96 min (iv) 93 min (v) 99 min	s, the
A person has to travel from one town to another town which is at a distance of 825 km. He covers 363 km hr. In how much more time will he reach his destination? (i) 9 hr (ii) 11 hr (iii) 14 hr (iv) 17 hr (v) 19 hr	in 11
17. The cost of 18 kg of pumpkins is ₹468. How many kgs of pumpkins can be purchased with ₹312 ? (i) 7 kg (ii) 15 kg (iii) 17 kg (iv) 9 kg (v) 12 kg	
18. The cost of 20 kg of potatoes is ₹460. How much has to be paid to purchase 16 kg of potatoes ? (i) ₹371 (ii) ₹353 (iii) ₹362 (iv) ₹368 (v) ₹380	
19. The weight of 11 rounds of copper wire is 286 kg. How many rounds of copper wire is present in 260 kg? (i) 8 (ii) 10 (iii) 13 (iv) 11 (v) 9	
60 men can dig a canal in 112 days working for 12 hr per day. How many men are required to complete the in 48 days working for 14 hr per day? (i) 123 (ii) 120 (iii) 121 (iv) 119 (v) 118	: work
21. 20 men can dig a trench in 19 days. But after working for 11 days, 12 men left. How many more day required to complete the work? (i) 21days (ii) 20days (iii) 22days (iv) 19days (v) 18days	s are
In a hostel mess there are provisions enough for 15 students for 18 days. If 8 more students join the hostel long will the provisions last? (i) 16.74 days (ii) 11.74 days (iii) 14.74 days (iv) 8.74 days (v) 6.74 days	l, how
23. In a hostel mess, there are provisions enough for 12 students for 19 days. After 14 days, 7 students left many more days will the provisions last? (i) 12.00 days (ii) 15.00 days (iii) 17.00 days (iv) 7.00 days (v) 9.00 days	. How
24. A bus ticket fare for 18 km costs ₹58. How much is the fare for 14 km? (i) ₹45.11 (ii) ₹48.11 (iii) ₹42.11 (iv) ₹50.11 (v) ₹40.11	
 The cost of 11 pens is ₹121 and 12 pencils is ₹96. With an amount of ₹313, 13 pencils are purchased. How pens can be purchased with the remaining amount? (i) 20 (ii) 17 (iii) 19 (iv) 18 (v) 21 	many
The cost of 20 pens is ₹240 and 11 pencils is ₹66. With an amount of ₹264, 17 pens are purchased. How pencils can be purchased with the remaining amount?	many

(i) 11 (ii) 9 (iii) 12 (iv) 10 (v) 8

27. The sales tax for ₹100 of a bill is ₹15. How much sales tax has to be paid for a bill of ₹260 ?

(i) ₹42.00 (ii) ₹36.00 (iii) ₹34.00 (iv) ₹39.00 (v) ₹44.00

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A group of pilgrims have to cover 24 km to reach a shrine. They walk 10 km in 19 hr. At what speed they have to
    walk to cover the remaining distance in 12 hr?
    (i) 1.17 kmph (ii) 0.17 kmph (iii) 3.17 kmph (iv) 2.17 kmph (v) 9.17 kmph
29. To stitch a shirt, 178 cm of cloth is needed. How much cloth is needed to stitch 9 shirts?
    (i) 1752 cm (ii) 1572 cm (iii) 1602 cm (iv) 1742 cm (v) 1322 cm
30. 20 m of cloth is required to stitch 7 dresses. How many meters of cloth is required to stitch 15 dresses?
     (i) 39.86 m (ii) 37.86 m (iii) 45.86 m (iv) 42.86 m (v) 47.86 m
31. The cost of 8 dozen bananas is ₹320. What is the cost of 19 dozens?
     (i) ₹758 (ii) ₹760 (iii) ₹777 (iv) ₹738
32. 13 mangoes weigh 5 kg. If 6 mangoes are needed, how many kgs have to be purchased?
    (i) 2.31 kg (ii) 3.31 kg (iii) 0.31 kg (iv) 1.31 kg (v) 4.31 kg
33. 12 men or 40 women can earn ₹1200 per day. How much is earned by 18 men and 13 women in a day?
     (i) ₹2330 (ii) ₹2040 (iii) ₹2190 (iv) ₹2250 (v) ₹2170
34. The total wage of 9 labourers for 19 days is ₹41040. What will be the total wage of 13 labourers for 10 days?
     (i) ₹29900 (ii) ₹33600 (iii) ₹31200 (iv) ₹32500 (v) ₹30800
35. 16 artisans can make 40 idols in 20 days. How many artisans are required to make 70 idols in 28 days?
    (i) 18 (ii) 20 (iii) 21 (iv) 19 (v) 22
    56 workers working for 10 hr per day can dig a pit in 24 days. How many days are needed for 48 workers working
    4 hr per day to dig the same pit?
    (i) 75 days (ii) 73 days (iii) 70 days (iv) 65 days (v) 67 days
37. 11 cows eat 2299 kg of grass in 19 days. How much of grass has to be procured to feed 9 cows for 20 days?
    (i) 2130 kg (ii) 2010 kg (iii) 1840 kg (iv) 1850 kg (v) 1980 kg
    Cost of 20 toys of TypeA is ₹120 and 9 toys of TypeB is ₹108. Out of a sum of ₹163, 17 toys of TypeA are
    purchased. If 10 toys of TypeB have to be purchased, how much extra amount is needed?
    (i) ₹62 (ii) ₹64 (iii) ₹59 (iv) ₹54 (v) ₹56
    5 men can make 200 baskets in 5 days. 12 women can make 168 baskets in 7 days. How many baskets are
    made by 3 men and 6 women in 10 days?
    (i) 361 (ii) 362 (iii) 360 (iv) 357 (v) 359
    To irrigate 16 acres of a field, 80000 I of water is needed. If 5 more acres are brought under cultivation, how
    many Its of water is needed?
    (i) 80000.00 \, \text{l} (ii) 105000.00 \, \text{l} (iii) 117000.00 \, \text{l} (iv) 133000.00 \, \text{l} (v) 92000.00 \, \text{l}
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30 labourers can cultivate a field in 12 days working 2 hr per day. How many more labourers are needed to

cultivate double the field in 10 days working 3 hr per day?

(i) 19 (ii) 17 (iii) 21 (iv) 18 (v) 15

- 42. 18 workers working 5 hr per day are paid ₹85500 for 19 days. How much has to be paid to 19 workers working 13 hr per day for 15 days?

 (i) ₹197250 (ii) ₹170250 (iii) ₹212250 (iv) ₹185250 (v) ₹169250
 43. The air ticket charges for 33 persons for a flight is ₹142461, inclusive of ₹317 as airport tax per person. How much has to be paid if 20 persons drop out of the trip?

 (i) ₹54921 (ii) ₹58721 (iii) ₹56121 (iv) ₹56821 (v) ₹53421
 - The specification on a printer says that it prints 500 pages in 10 min. If 3750 pages have to be printed, how long will it take ?
 - (i) 80 min (ii) 70 min (iii) 78 min (iv) 72 min (v) 75 min
 - 45. 14 gm of gold costs ₹28000. What is the cost of 21 gm?
 - (i) ₹42000 (ii) ₹42500 (iii) ₹39400 (iv) ₹44200 (v) ₹40600
 - 46. A banker gave foreign exchange of \$17 for ₹799. How many dollars will the customer get for ₹1598 ?
 - (i) \$29 (ii) \$37 (iii) \$31 (iv) \$34 (v) \$39
 - 47. 12 workers take 17 days to build a room. After working for 11 days, 5 workers left. In how many more days is the room built ?
 - (i) 10.29 days (ii) 7.29 days (iii) 13.29 days (iv) 5.29 days (v) 15.29 days

A can do $\frac{1}{10}$ of a particular work in 5 days.

B can do $\frac{1}{7}$ of the same work in 2 days.

C can do $\frac{1}{13}$ of the same work in 4 days.

If A, B and C work together, in how many days is the work completed?

(i)
$$9\frac{19}{1009}$$
 days (ii) $9\frac{35}{1007}$ days (iii) $9\frac{39}{1007}$ days (iv) $9\frac{11}{201}$ days (v) $9\frac{37}{1007}$ days

- A journey consists of three legs. First 21 km are travelled at a speed of 30 kmph. Next 60 km are travelled at a 49. speed of 150 kmph. Last 88 km are travelled at a speed of 80 kmph. Find the total time taken to complete the journey.
 - (i) $2\frac{3}{4}$ hr (ii) $1\frac{5}{6}$ hr (iii) 2 hr (iv) $2\frac{1}{5}$ hr (v) $2\frac{2}{5}$ hr
- In an eating contest, the eating capacities of A, B and C are 11 gm/sec, 8 gm/sec and 9 gm/sec respectively. If 50. the amount of food to be eaten is 20.16 kg, in how much time is it consumed if all three participants start eating together?
 - (i) 10 min (ii) 14 min (iii) 11 min (iv) 12 min (v) 13 min
- In a certain exam, for every correct answer, 7 marks are added. For every wrong answer 3 marks are subtracted.
- 51. A student attempted 64 questions and secured 268 marks. How many answers are correct and how many are wrong?
 - (i) 46 correct and 18 wrong (ii) 47 correct and 17 wrong (iii) 48 correct and 16 wrong
 - (iv) 44 correct and 20 wrong (v) 45 correct and 19 wrong

A production line consists of three stages to be completed serially.

Stage1 work can be done by 15 workers in 7 days.

Stage2 work can be done by 9 workers in 6 days.

Stage3 work can be done by 14 workers in 5 days.

If 12,8 and 15 workers are hired to do Stage1, Stage2 and Stage3 works respectively,

in how many days is the work completed?

(i)
$$20\frac{1}{2}$$
 days (ii) $20\frac{1}{6}$ days (iii) $20\frac{1}{4}$ days (iv) $19\frac{5}{6}$ days (v) $20\frac{1}{8}$ days

The slab rates of a city's water department are as follows

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	-	30	15
53.	30	-	50	20
	50		70	25
	70	-	remaining	30

How much amount has to be paid if the consumption is 11 kl.

(i) ₹165 (ii) ₹183 (iii) ₹153 (iv) ₹159 (v) ₹182

The slab rates of a city's water department are as follows

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	-	60	16
54.	60	-	70	21
	70	-	90	26
	90	-	remaining	31

How much amount has to be paid if the consumption is 68 kl.

(i) ₹1358 (ii) ₹1078 (iii) ₹1128 (iv) ₹1298 (v) ₹948

The slab rates of a city's water department are as follows

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	F	30	18
55.	30	-	60	23
	60	F	90	28
	90	F	remaining	33

How much amount has to be paid if the consumption is 70 kl.

(i) ₹1630 (ii) ₹1350 (iii) ₹1560 (iv) ₹1510 (v) ₹1430

The slab rates of a city's water department are as follows

	Low Val (kl)	F	High Val (kl)	Rate Rs/kl
	0	F	30	12
56.	30	F	60	17
	60	F	70	22
	70	F	remaining	27

How much amount has to be paid if the consumption is 86 kl.

(i) ₹1282 (ii) ₹1592 (iii) ₹1482 (iv) ₹1772 (v) ₹1522

		Д	ssignment Key		
1) (ii)	2) (v)	3) (ii)	4) (i)	5) (v)	6) (i)
7) (iv)	8) (ii)	9) (v)	10) (iii)	11) (iii)	12) (v)
13) (iii)	14) (v)	15) (iii)	16) (iii)	17) (v)	18) (iv)
19) (ii)	20) (ii)	21) (ii)	22) (ii)	23) (i)	24) (i)
25) (iii)	26) (iv)	27) (iv)	28) (i)	29) (iii)	30) (iv)
31) (ii)	32) (i)	33) (iii)	34) (iii)	35) (ii)	36) (iii)
37) (v)	38) (iii)	39) (iii)	40) (ii)	41) (iv)	42) (iv)
43) (iii)	44) (v)	45) (i)	46) (iv)	47) (i)	48) (v)
49) (iv)	50) (iv)	51) (i)	52) (ii)	53) (i)	54) (iii)
55) (iv)	56) (v)				

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