Name : Unitary Method Problems

Chapter: Unitary Method

Grade: ICSE Grade VIII

License: Non Commercial Use

L.	If 5	samosas	cost ₹50,	how much	will	40 samosas cost?
----	------	---------	-----------	----------	------	------------------

(i) ₹400 (ii) ₹414 (iii) ₹373 (iv) ₹415 (v) ₹388

## 2. If 11 pens cost ₹110, how many pens can be purchased with ₹260?

(i) 29 (ii) 27 (iii) 26 (iv) 23 (v) 25

# 3. If 12 I of butter milk costs ₹168, how much will 28 I cost?

(i) ₹387 (ii) ₹392 (iii) ₹404 (iv) ₹378

## 4. If 9 I of puja oil costs ₹108, how much of puja oil costs ₹300?

(i) 25 | (ii) 22 | (iii) 28 | (iv) 20 | (v) 30 |

#### 5. If 18 men can make 90 baskets in a day, how many baskets are made by 21 men in a day?

(i) 105 (ii) 103 (iii) 107 (iv) 104 (v) 106

#### 6. If 16 men can make 48 sweaters in a day, how many men are needed to make 57 sweaters in a day?

(i) 22 (ii) 18 (iii) 19 (iv) 20 (v) 16

#### 7. If Mahender can read 340 pages in 20 hr, how many pages can he read in 19 hr?

(i) 324 (ii) 321 (iii) 322 (iv) 323 (v) 326

## 8. If Charan can read 160 pages in 16 hr, he can read 200 pages in how many hours?

(i) 20 hr (ii) 17 hr (iii) 25 hr (iv) 15 hr (v) 23 hr

# 9. If Bali can read 48 pages in a 264 pages book in 2 hr, how much more time will it take to complete the book?

(i) 7 hr (ii) 11 hr (iii) 9 hr (iv) 8 hr (v) 10 hr

#### 10. If Prasad can make 110 burgers in 10 min, in how much time can he complete an order of 473 burgers?

(i) 38 min (ii) 48 min (iii) 46 min (iv) 43 min (v) 40 min

#### 11. If 72 men can do a piece of work in 70 days, how many men can do the same work in 112 days?

(i) 45 (ii) 44 (iii) 46 (iv) 47 (v) 43

# 12. If 168 men can do a piece of work in 35 days, 84 men can do the same work in how many days?

(i) 75 days (ii) 73 days (iii) 65 days (iv) 67 days (v) 70 days

# If 18 men can build $\frac{1}{4}$ of a wall in 45 days,

in how much more time is the wall completely built?

(i) 123 days (ii) 161 days (iii) 135 days (iv) 122 days (v) 141 days

A vehicle can cover certain distance in 96 min, running at a speed of 150 kmph. At what speed must the vehicle run to cover the same distance in 80 min?
(i) 178 kmph (ii) 193 kmph (iii) 154 kmph (iv) 192 kmph (v) 180 kmph
A vehicle can cover certain distance in 50 min, running at a speed of 156 kmph. In how many minutes, the vehicle covers the same distance running at a speed of 120 kmph?
(i) 70 min (ii) 65 min (iii) 68 min (iv) 62 min (v) 60 min
A person has to travel from one town to another town which is at a distance of 638 km. He covers 435 km in 19 hr. In how much more time will he reach his destination?
(i) 5 hr (ii) 9 hr (iii) 7 hr (iv) 8 hr (v) 6 hr
17. The cost of 21 kg of tomatoes is ₹567. How many kgs of tomatoes can be purchased with ₹351?  (i) 18 kg (ii) 10 kg (iii) 16 kg (iv) 8 kg (v) 13 kg
<ul> <li>18. The cost of 16 kg of brinjals is ₹448. How much has to be paid to purchase 10 kg of brinjals?</li> <li>(i) ₹282 (ii) ₹280 (iii) ₹264 (iv) ₹295 (v) ₹268</li> </ul>
19. The weight of 16 rounds of copper wire is 416 kg. How many rounds of copper wire is present in 468 kg?  (i) 18 (ii) 17 (iii) 16 (iv) 21 (v) 19
78 men can dig a canal in 98 days working for 5 hr per day. How many men are required to complete the work in 30 days working for 14 hr per day?
(i) 92 (ii) 90 (iii) 91 (iv) 88 (v) 93
21. 12 men can dig a trench in 12 days. But after working for 6 days, 9 men left. How many more days are required to complete the work?
(i) 23 days (ii) 25 days (iii) 22 days (iv) 26 days (v) 24 days
In a hostel mess there are provisions enough for 11 students for 13 days. If 7 more students join the hostel, how long will the provisions last?
(i) 7.94 days (ii) 9.94 days (iii) 5.94 days (iv) 6.94 days (v) 8.94 days
23. In a hostel mess, there are provisions enough for 14 students for 17 days. After 13 days, 8 students left. How many more days will the provisions last?
(i) 11.33 days (ii) 7.33 days (iii) 9.33 days (iv) 10.33 days (v) 8.33 days
24. A bus ticket fare for 14 km costs ₹93. How much is the fare for 18 km?
(i) ₹126.57 (ii) ₹104.57 (iii) ₹143.57 (iv) ₹115.57 (v) ₹119.57
The cost of 19 pens is ₹285 and 18 pencils is ₹90. With an amount of ₹265, 20 pencils are purchased. How many pens can be purchased with the remaining amount?
(i) 14 (ii) 8 (iii) 11 (iv) 12 (v) 10
The cost of 19 pens is ₹361 and 15 pencils is ₹135. With an amount of ₹479, 20 pens are purchased. How many pencils can be purchased with the remaining amount?  (i) 10 (ii) 12 (iii) 8 (iv) 11 (v) 13
27. The sales tax for ₹100 of a bill is ₹12. How much sales tax has to be paid for a bill of ₹241?

(i) ₹28.92 (ii) ₹25.92 (iii) ₹31.92 (iv) ₹23.92 (v) ₹33.92

```
A group of pilgrims have to cover 15 km to reach a shrine. They walk 10 km in 11 hr. At what speed they have to
    walk to cover the remaining distance in 7 hr?
    (i) 0.71 kmph (ii) 2.71 kmph (iii) 8.71 kmph (iv) 7.71 kmph (v) 1.71 kmph
29. To stitch a shirt, 150 cm of cloth is needed. How much cloth is needed to stitch 5 shirts?
    (i) 776 cm (ii) 750 cm (iii) 722 cm (iv) 744 cm (v) 755 cm
30. 10 m of cloth is required to stitch 8 dresses. How many meters of cloth is required to stitch 23 dresses?
    (i) 31.75 m (ii) 25.75 m (iii) 28.75 m (iv) 23.75 m (v) 33.75 m
31. The cost of 10 dozen bananas is ₹310. What is the cost of 27 dozens?
    (i) ₹840 (ii) ₹813 (iii) ₹821 (iv) ₹859 (v) ₹837
32. 16 mangoes weigh 10 kg. If 10 mangoes are needed, how many kgs have to be purchased?
    (i) 5.25 kg (ii) 4.25 kg (iii) 7.25 kg (iv) 8.25 kg (v) 6.25 kg
33. 32 men or 40 women can earn ₹1600 per day. How much is earned by 11 men and 16 women in a day?
    (i) ₹1110 (ii) ₹1040 (iii) ₹1320 (iv) ₹1350 (v) ₹1190
34. The total wage of 7 labourers for 17 days is ₹47600. What will be the total wage of 13 labourers for 14 days?
    (i) ₹71300 (ii) ₹71100 (iii) ₹73400 (iv) ₹72800 (v) ₹75500
35. 15 artisans can make 50 idols in 80 days. How many artisans are required to make 28 idols in 56 days?
    (i) 13 (ii) 14 (iii) 11 (iv) 12 (v) 10
    45 workers working for 2 hr per day can dig a pit in 60 days. How many days are needed for 54 workers working
    10 hr per day to dig the same pit?
    (i) 5 days (ii) 10 days (iii) 13 days (iv) 7 days (v) 15 days
37. 19 cows eat 7220 kg of grass in 20 days. How much of grass has to be procured to feed 5 cows for 9 days?
    (i) 852 kg (ii) 839 kg (iii) 878 kg (iv) 867 kg (v) 855 kg
    Cost of 20 toys of TypeA is ₹140 and 15 toys of TypeB is ₹240. Out of a sum of ₹253, 9 toys of TypeA are
    purchased. If 14 toys of TypeB have to be purchased, how much extra amount is needed?
    (i) ₹29 (ii) ₹39 (iii) ₹37 (iv) ₹31 (v) ₹34
    10 men can make 630 baskets in 9 days. 3 women can make 135 baskets in 9 days. How many baskets are
    made by 2 men and 2 women in 10 days?
    (i) 242 (ii) 237 (iii) 241 (iv) 240 (v) 239
    To irrigate 20 acres of a field, 70000 I of water is needed. If 10 more acres are brought under cultivation, how
    many Its of water is needed?
    (i) 81000.00 | (ii) 113000.00 | (iii) 90000.00 | (iv) 117000.00 | (v) 105000.00 |
```

18 labourers can cultivate a field in 18 days working 4 hr per day. How many more labourers are needed to

cultivate double the field in 12 days working 9 hr per day?

(i) 5 (ii) 3 (iii) 7 (iv) 8 (v) 6

- 42. 10 workers working 7 hr per day are paid ₹26600 for 19 days. How much has to be paid to 13 workers working 5 hr per day for 10 days?

  (i) ₹14600 (ii) ₹14800 (iii) ₹11500 (iv) ₹12200 (v) ₹13000

  43. The air ticket charges for 34 persons for a flight is ₹281282, inclusive of ₹473 as airport tax per person. How much has to be paid if 10 persons drop out of the trip?

  (i) ₹198552 (ii) ₹216552 (iii) ₹185552 (iv) ₹223552 (v) ₹191552

  44. The specification on a printer says that it prints 1200 pages in 15 min. If 6800 pages have to be printed, how long will it take?

  (i) 88 min (ii) 80 min (iii) 90 min (iv) 85 min (v) 82 min
  - 45. 15 gm of gold costs ₹30000. What is the cost of 26 gm?
    - (i) ₹54800 (ii) ₹50400 (iii) ₹51700 (iv) ₹53200 (v) ₹52000
  - 46. A banker gave foreign exchange of \$15 for ₹450. How many dollars will the customer get for ₹1020 ?
    - (i) \$29 (ii) \$39 (iii) \$37 (iv) \$34 (v) \$31
  - 47. 19 workers take 14 days to build a room. After working for 8 days, 9 workers left. In how many more days is the room built?
    - (i) 16.40 days (ii) 14.40 days (iii) 8.40 days (iv) 11.40 days (v) 6.40 days

A can do  $\frac{1}{4}$  of a particular work in 10 days.

B can do  $\frac{1}{14}$  of the same work in 7 days.

C can do  $\frac{1}{6}$  of the same work in 13 days.

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

(i) 
$$20\frac{2980}{3673}$$
 days (ii)  $20\frac{1020}{1223}$  days (iii)  $20\frac{3020}{3671}$  days (iv)  $20\frac{3018}{3671}$  days (v)  $20\frac{3022}{3671}$  days

- A journey consists of three legs. First 42 km are travelled at a speed of 140 kmph. Next 32 km are travelled at a 49. speed of 40 kmph. Last 45 km are travelled at a speed of 90 kmph. Find the total time taken to complete the journey.
  - (i)  $1\frac{4}{5}$  hr (ii) 2 hr (iii)  $1\frac{2}{5}$  hr (iv)  $1\frac{3}{5}$  hr (v)  $1\frac{1}{3}$  hr
- In an eating contest, the eating capacities of A, B and C are 14 gm/sec, 5 gm/sec and 8 gm/sec respectively. If 50. the amount of food to be eaten is 9.72 kg, in how much time is it consumed if all three participants start eating together?
  - (i) 6 min (ii) 3 min (iii) 5 min (iv) 8 min (v) 7 min
- In a certain exam, for every correct answer, 8 marks are added. For every wrong answer 4 marks are subtracted.
- 51. A student attempted 39 questions and secured 240 marks. How many answers are correct and how many are wrong?
  - (i) 31 correct and 8 wrong (ii) 34 correct and 5 wrong (iii) 35 correct and 4 wrong
  - (iv) 33 correct and 6 wrong (v) 32 correct and 7 wrong

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

Stage1 work can be done by 10 workers in 6 days.

Stage2 work can be done by 7 workers in 15 days.

Stage3 work can be done by 8 workers in 9 days.

If12,13 and 11 workers are hired to do Stage1, Stage2 and Stage3 works respectively,

in how many days is the work completed?

(i) 
$$19\frac{89}{143}$$
 days (ii)  $19\frac{89}{145}$  days (iii)  $19\frac{89}{141}$  days (iv)  $19\frac{7}{11}$  days (v)  $19\frac{87}{143}$  days

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

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	-	20	18
53.	20	-	40	23
	40	-	70	28
	70	-	remaining	33

How much amount has to be paid if the consumption is 17 kl.

(i) ₹322 (ii) ₹319 (iii) ₹302 (iv) ₹306 (v) ₹291

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

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	-	20	17
54.	20	-	30	22
	30	-	50	27
	50	-	remaining	32

How much amount has to be paid if the consumption is 25 kl.

(i) ₹444 (ii) ₹450 (iii) ₹454 (iv) ₹475 (v) ₹427

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

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	-	50	18
55.	50	-	70	23
	70	-	90	28
	90	-	remaining	33

How much amount has to be paid if the consumption is 80 kl.

(i) ₹1790 (ii) ₹1400 (iii) ₹1920 (iv) ₹1480 (v) ₹1640

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

	Low Val (kl)	-	High Val (kl)	Rate Rs/kl
	0	-	40	17
56.	40	-	70	22
	70	-	90	27
	90	-	remaining	32

How much amount has to be paid if the consumption is 93 kl.

(i) ₹2136 (ii) ₹1856 (iii) ₹1806 (iv) ₹2026 (v) ₹1976

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

Copyright © Small Systems Computing Pvt. Ltd.