ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

Subject- Mathematics **Answers of Worksheet- 15** **Class – 5**
Date -25.04.2020

Chapter- Unitary Method

Answer the following questions (MCQ) : **(1×15):**

Q1.In a dairy farm, 40 cows eat 40 bags of husk in 40 days. In how many days one cow will eat one bag of husk?

1.

A. 15
B. 40
C. 38
D. 32

Correct Option: B

40 cows eat 40 bags of husk in 40 days.

∴ 1 cows eat 40 bags of husk in 40 x 40 days.

∴ 1 cows eat 1 bags of husk in 40 x 40 / 40 days.

∴ 1 cows eat 1 bags of husk in 40 days.

Q2. 21 goats eat as much as **15 cows**. How many goats eat as much as **35 cows**?

1.

A. 38
B. 49
C. 37
D. 41

Correct Option: B

15 Cows eat as much as **21 Goats**.

∴ **1 Cows** eat as much as **21/ 15 Goats**.

∴ **35 Cows** eat as much as **21 x 35 / 15 Goats**.

∴ **35 Cows** eat as much as **21 x 7 / 3 Goats**.

∴ **35 Cows** eat as much as **7 x 7 Goats**.

∴ **35 Cows** eat as much as **49 Goats**.

Q3. 39 persons can repair a road in **12 days**, working **5 hours** a day. In how many days will **30 persons**, working **6 hours** a day, complete the work?

1.

A. 10
B. 13
C. 18
D. 136

Correct Option: B

Since **39** persons can repair a road by working **5 hours** in a day in **12 days**.

∴ **1** persons can repair a road by working **5 hours**in a day in **39 x 12 days**.

∴ **1** persons can repair a road by working **1 hours**in a day in **39 x 12 x 5 days**.

∴ **30** persons can repair a road by working **1 hours**in a day in **39 x 12 x 5 / 30 days**.

∴ **30** persons can repair a road by working **6 hours** in a day in **39 x 12 x 5 / 30 x 6 days**.

∴ **30** persons can repair a road by working **6 hours** in a day in **39 x 2 x 1 / 6 days**.

∴ **30** persons can repair a road by working **6 hours** in a day in **39 x 1 x 1 / 3 days**.

∴ **30** persons can repair a road by working **6 hours** in a day in **13 days**.

Q4 . mat-weavers can weave **4** mats in **4 days**. At the same rate, how many mats would be woven by **8** mat-weavers in **8**days?

1.

A. 16
B. 12
C. 18
D. 14

Correct Option: A

4 mat-weavers in **4 days** can weave **4** mats.

1 mat-weavers in **4 days** can weave **4 / 4** mats.

1 mat-weavers in **1 days** can weave **4 / 4 x 4** mats.

8 mat-weavers in **1 days** can weave **4 x 8 / 4 x 4**mats.

8 mat-weavers in **8 days** can weave **4 x 8 x 8 / 4 x 4** mats.

8 mat-weavers in **8 days** can weave **4 x 2 x 2**mats.

8 mat-weavers in **8 days** can weave **16** mats.

Q5.If a **quarter Kg** of potato costs **60 paise**, How many paise will **200 gm**cost?

1.

A. 48
B. 45
C. 59
D. 72

Correct Option: A

As we know that Quarter Kg = 250 Gram

According to question,

250 Gram of potato costs **60 paise**.

∴ **1 Gram** of potato costs **60 / 250 paise**.

∴ **200 Gram** of potato costs **60 x 200 / 250 paise**.

∴ **200 Gram** of potato costs **60 x 20 / 25 paise**.

∴ **200 Gram** of potato costs **60 x 4 / 5 paise**.

∴ **200 Gram** of potato costs **12 x 4 paise**.

∴ **200 Gram** of potato costs **48 paise**.

Q6.If 20 articles cost ₹ 90, then the cost of 9 articles is ?

1.

A. ₹ 45
B. ₹ 40.50
C. ₹ 4.50
D. None of these

Correct Option: B

Cost of 20 articles = ₹ 90

Cost of 1 article = ₹ 90/20

∴ Cost of 9 article = 9 x 90/20 = ₹ 40.50

Q7.If cost of 24 oranges is ₹ 72, then find out the cost of 120 oranges.

1.

A. ₹ 180
B. ₹ 360
C. ₹ 172
D. ₹ 500

Correct Option: B

Let the required cost be ₹ N.

More orange, more cost (Direct proportion)

24 : 120 : : 72 : N

∴ N = (120 x 72)/24 = ₹ 360

Q8.If cost of 12 pens is ₹ 84, then what is the cost of 10 such pens ?

1.

A. ₹ 90
B. ₹ 72
C. ₹ 65
D. ₹ 70

Correct Option: D

∵ Cost of 12 pens = ₹ 84

Cost of 1 pen = ₹ 84/12

∴ Cost of 10 pens = (84/12) x 10

= 7 x 10 = ₹ 70

Q9.If cost of 15 eggs is ₹ 75, then find out the cost of 4 dozens eggs.

1.

A. ₹ 240
B. ₹ 300
C. ₹ 150
D. ₹ 185

Correct Option: A

∵ Cost of 15 eggs = ₹ 75

∴ Cost of 1 egg = ₹ 75/15

∴ Cost of 4 dozens (4 x 12) = Cost of 48 eggs

= (75/15) x 48 = ₹ 240

Q10. If 16 dozens bananas cost ₹ 360, then how many bananas can be bought in ₹ 60 ?

1.

A. 16 bananas
B. 48 bananas
C. 32 bananas
D. 50 bananas

Correct Option: C

Let the required number of bananas be N.

16 dozens bananas = 16 x 12 = 192 bananas

Less bananas, Less cost (Direct proportion)

360 : 60 : : 192 : N

∴ N = (60 x 192)/360 = 32 bananas

Q11.certain industrial loom weaves **0.128 meters** of cloth every second. Approximately how many seconds will it take for the loom to weave **25 meters** of cloth?

1.

A. 220
B. 200
C. 170
D. 195

Correct Option: D

A certain industrial loom weaves **0.128 meters** of cloth in **1** second.

A certain industrial loom weaves **1 meters** of cloth in **1/0.128** second.

A certain industrial loom weaves **25 meters** of cloth in **25 x 1/ 0.128** second.

A certain industrial loom weaves **25 meters** of cloth in **195.312** second.

Q12 .If **18 binders** bind **900** books in **10 days**, How many binders will be required to bind **660** books in **12 days**?

1.

A. 21
B. 14
C. 18
D. 11

Correct Option: D

According to given question,

Since **900** books are bonded in **10 days** by **18 binders**.

∴ **1** books are bonded in **10 days** by **18 / 900 binders**.

∴ **1** books are bonded in **1 days** by **18 x 10 / 900 binders**.

∴ **660** books are bonded in **1 days** by **18 x 10 x 660 / 900 binders**.

∴ **660** books are bonded in **12 days** by **18 x 10 x 660 / 12 x 900 binders**.

∴ **660** books are bonded in **12 days** by **18 x 10 x 55 / 900 binders**.

∴ **660** books are bonded in **12 days** by **18 x 55 / 90 binders**.

∴ **660** books are bonded in **12 days** by **55 / 5 binders**.

∴ **660** books are bonded in **12 days** by **11 binders**.

Q13.If the Price of **6 toys** is **Rs. 264.37**, What will be the approximate price (Rs) of **5 toys**?

1.

A. 230
B. 120
C. 320
D. 220

Correct Option: D

Given in the question,

Price of **6 toys** is **Rs. 264.37**.

∴ Price of **1 toys** is **Rs. 264.37/ 6** .

∴ Price of **5 toys** is **Rs. 264.37 x 5 / 6** .

∴ Price of **5 toys** is **Rs. 44 x 5** .

∴ Price of **5 toys** is **Rs. 220**.

Q14. A person works on a project and completes **5/8** of the job in **10 days**. At this rate, how many more days will he it take to finish the job?

1.

A. 12
B. 16
C. 10
D. 9

Correct Option: B

A person completes **5/8** part of the project in **10 days**.

A person completes the project in **10/5/8 days**.

A person completes the project in **10 x 8 /5 days**.

A person completes the project in **2 x 8 days**.

A person completes the project in **16 days**.

Q15.A rope can make **70 rounds** of the circumference of a cylinder whose radius of the base is **14 cm**. how many times can it go round a cylinder having radius **20 cm?**

1.

A. 49 rounds
B. 54 rounds
C. 56 rounds
D. 77 rounds

Correct Option: A

Given in the question,

If radius is **14 cm** then rope can make **70** rounds.

If radius is **1 cm** then rope can make **70 x 14** rounds.

If radius is **20 cm** then rope can make **70 x 14 / 20** rounds.

If radius is **20 cm** then rope can make **7 x 7** rounds.

If radius is **20 cm** then rope can make **49** rounds.

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