Sub: Algebra and Geometry   **Class: 7**   **Date: 01.03.21**

Duration: 40 min   **Worksheet 14**   **Full Marks: 15**

LINEAR EQUATION IN ONE VARIABLE

Choose the correct option:

1. Which of the following is not a linear equation in one variable?

A. 33z+5

B. 33(x+y)

C. 33x+5

D. 33y+5

2. The solution of 2x-3=7 is:

A. 5

B. 7

C. 12

D. 11

3. The solution of 2y + 9 = 4 is:

A. 9/2

B. 4/9

C. -⅖

D. -5/2

4. The solution of y/5 = 10 is:

A. 15

B. 10

C. 50

D. 5

5. What should be added to -7/3 to get 3/7?

A. 21/58

B. 58/21

C. 47/21

D. 50/21

6. The perimeter of the rectangle is 20cm. If the length of the rectangle is 6cm, then its breadth will be:

A. 4 cm

B. 6 cm

C. 10 cm

D. 14 cm

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7. The age of the father is three times the age of the son. If the age of the son is 15 years old, then the age of the father is:

A. 50 years

B. 55 years

C. 40 years

D. 45 years

8. The difference between two whole numbers is 66. The ratio of the two numbers is 2: 5. The two numbers are:

A. 60 and 6

B. 100 and 33

C. 110 and 44

D. 99 and 33

9. Three consecutive integers add up to 51. The integers are:

A. 16,17,18

B. 15,16,17

C. 17,18,19

D. 18,19,20

10. The solution for 3m = 5m – (8/5) is:

A. 8/5

B. ⅘

C. 5/4

D. 4/3

11. A gym membership charges an initial fee of $100 plus a $25 fee every month. Another gym only charges $45 every month. After how many months will the total cost for both gyms be the same?

   A. 2
   B. 3
   C. 4
   D. 5

12. Mr. Smith works as a salesman at a car dealership. He is paid a base salary of $1,300 each month, and he receives a commission of $150 for each vehicle he sells. If last month Smith earned $2,500, how many cars did he sell last month?

   A. 8
   B. 10
   C. 6
   D. 12

13. A math worksheet took Jeremy 1 hour and 15 minutes to complete. Each numerical problem took three minutes to complete and each word problem took five minutes to complete.
If there were 10 numerical problems on the worksheet, how many word problems were there?

   A. 9

B. 6
C. 7
D. 8

14. Two trains are approaching each other on parallel tracks. One train is travelling at 50 mph and the other at 100 mph. If the trains are currently 900 miles apart, how many hours until they pass each other?

A. 6 hrs.
B. 5 hrs.
C. 7 hrs.
D. 18 hrs.

**15. Rhonda has a small workshop that makes roller skates. Her shop has fixed costs of $500 per day, plus it costs her $18 in materials to make each pair of skates
If she sells each pair of skates for $50, what is the minimum number of skates she must sell per day in order to make a profit?**

A. 16
B. 15
C. 17
D. 8