**LESSON 22—NOTES**

**ONE-STEP EQUATIONS—ADDING AND SUBTRACTING**

EQUATION—A NUMBER SENTENCE THAT CONTAINS THE EQUAL SIGN.

1. WHEN SOLVING AN EQUATION, YOUR GOAL IS TO ISOLATE THE

 VARIABLE ON ONE SIDE OF THE EQUATION.

2. MOVE THE NUMBER TO THE OTHER SIDE USING THE OPPOSITE

 OPERATION.

THE STEPS, OR PROCESS, IS THE MOST IMPORTANT PART!!

EX: A + 7 = 15 EX: V + 9 = 4 EX: N – 23 = 15

EX: -16 + C = -10 EX: W + 7 = 2 EX: -4 = T + 31

EX: 14 + k = 31 EX: m – 29 = 15 EX: c + 7 = -23

EX: -10 + h = 25 EX: 8 + u = -18 EX: -11 + w = -40

**LESSON 22—NOTES—STUDENT COPY**

**ONE-STEP EQUATIONS—ADDING AND SUBTRACTING**

EQUATION—\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

THE STEPS, OR PROCESS, IS THE MOST IMPORTANT PART!!

EX: A + 7 = 15 EX: V + 9 = 4 EX: N – 23 = 15

EX: -16 + C = -10 EX: W + 7 = 2 EX: -4 = T + 31

EX: 14 + k = 31 EX: m – 29 = 15 EX: c + 7 = -23

EX: -10 + h = 25 EX: 8 + u = -18 EX: -11 + w = -40

**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Class\_\_\_\_\_\_**

**LESSON 22: ADD/SUBT. ONE-STEP EQUATIONS**

**NWNC!! write the letter and answer.**

1. Michelle received $150 for her birthday and \_\_\_\_\_\_\_\_\_\_\_\_

 spent all the money on CD’s. The price of her

 CD’s ranged from $9.99 to $13.99. A reasonable

 total number of CD’s bought by Michelle is…….

A. fewer than 8 B. between 8 and 10

 C. between 10 and 15 D. more than 15

2. Mr. Enders works for a magazine company and \_\_\_\_\_\_\_\_\_\_\_\_

 processes new subscriptions. He can process

 between 20 and 32 subscriptions an hour. A

 reasonable total number of subscriptions pro-

 cessed by Mr. Enders in a 40-hour week is……

A. more than 1,800 B. between 1,400 & 1,800

 C. between 800 and 1,400 D. fewer than 800

3. Mrs. McBrayer teaches an arts-and-crafts class \_\_\_\_\_\_\_\_\_\_\_\_

 after school. For a jewelry-making project, each

 student uses between 22 and 38 beads. A

 reasonable total number of beads that would be

 used by a class with 36 students is…….

A. 750 B. 1,100 C. 1,500 D. 2,000

4. Which of these statements BEST describes the expression $\frac{m}{3}$ - 2. \_\_\_\_\_\_\_\_\_\_\_\_

A. 3 divided by a number, subtracted from 1.

 B. 2 less than the quotient of a number and 3.

 C. the quotient of m and 3 subtracted from 2.

 D. the difference of 3 divided by m, minus 2.

5. At a local grocery store, beans cost $0.88 per pound, and \_\_\_\_\_\_\_\_\_\_\_\_

 bread costs $1.48 for 2 loaves. Which equation can be used

 to find ***t***, the total cost if Don buys 1.19 pounds of beans

 and 1 loaf of bread?

 A. t = (1.19 + 0.88) + (1.48 + 2) B. t = (1.19 x 0.88) + (2 x 1.48)

 C. t = (1.19 x 0.88) + (1.48 ÷ 2) D. t = (1.19 x 0.88) + (2 ÷ 1.48)

**Solve:**

6. 9 + k = 21 7. m – 19 = 35 8. c + 9 = -13

 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

9. -15 + h = 20 10. 6 + u = - 8 11. -17 + w = -20

 \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

**Multiplication models:**

**For questions 12 & 13, what 2 fractions are multiplied in the model:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

 12. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Look at the following number pattern: 2, 5, 10, 17, 26……

 Which expression can be used to find the nth term in the sequence? (draw table)

 A. 2n B. n2 + 1

C. 3n + 1 D. 5n – 3

**Solve: use PEMDAS**

15. (23 + 10 • 3 ÷ 2) – 7 16. 27 ÷ 32 • 5 – 2 17. 5(4 + 8 ÷ 2)

 \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_\_

18. What does this symbol mean? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19. Write six hundred fifteen and 3 tenths as a decimal. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. What does the percent proportion look like? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_