

Thurs. 1/14

Name: LOZ

Class:

Ms. Trainor

## ALGEBRA

Solve.

1. 2 A number increased by 13 is 15. Find the number.  $x + 13 = 15$   $x = 2$
2. 8 One-half of a number is 4. Find the number.  $8 - 4 = 4$   $4 + 4 = 8$   $4 \times 2 = 8$   $\frac{1}{2} \times x = 4$
3. 12 One-half of a number is 6. Find the number.  $6 \times 2 = 12$   $\frac{1}{2} \times x = 6$
4. 7 A number increased by 10 is 17. Find the number.  $x + 10 = 17$   $x = 7$
5. 9 The sum of a number and five is 14. Find the number.  $x + 5 = 14$   $x = 9$   $14 - 5 = 9$
6. 14 Three less than a number is 11. Find the number.  $x - 3 = 11$   $11 + 3 = 14$   $x = 14$
7. 19 Five less than a number is 14. Find the number.  $x - 5 = 14$   $14 + 5 = 19$   $x = 19$
8. 3 The sum of a number and two is 5. Find the number.  $x + 2 = 5$   $x = 3$   $5 - 2 = 3$
9. 10 The sum of a number and seven is 17. Find the number.  $x + 7 = 17$   $17 - 7 = 10$   $x = 10$
10. 8 Two less than a number is 6. Find the number.  $x - 2 = 6$   $6 + 2 = 8$   $x = 8$
11. 20 A number diminished by 14 is 6. Find the number.  $x - 14 = 6$   $14 + 6 = 20$   $x = 20$
12. 4 One-half of a number is 2. Find the number.  $\frac{1}{2} \times x = 2$   $2 + 2 = 4$   $x = 4$
13. 17 A number diminished by 13 is 4. Find the number.  $x - 13 = 4$   $13 + 4 = 17$   $x = 17$
14. 17 Fifteen less than a number is 2. Find the number.  $x - 15 = 2$   $15 + 2 = 17$   $x = 17$
15. 7 The sum of a number and 15 is 22. Find the number.  $x + 15 = 22$   $22 - 15 = 7$   $x = 7$
16. 4 The sum of a number and 10 is 14. Find the number.  $x + 10 = 14$   $14 - 10 = 4$   $x = 4$
17. 19 A number diminished by 4 is 15. Find the number.  $x - 4 = 15$   $15 + 4 = 19$   $x = 19$
18. 2 One-half of a number is 1. Find the number.  $\frac{1}{2} \times x = 1$   $1 + 1 = 2$   $x = 2$



### Problem of the Lesson

What is the first name of the 35th president of the United States?

To find the answer, evaluate each expression shown using  $y = 4$ .

The value of each expression tells you the position of the unknown letter in the alphabet.

<u>10</u>	<u>15</u>	<u>28-70=8</u>	<u>17</u>
$3y - 2$	$2y + 7$	$(28 - 3y) \div 2$	$(10 + 8y) \div 3$

### Problem of the Lesson

Simplify.

1.  $6z + 2z - 5z$

$$8z - 5z = 3z$$

2.  $10y - 2y - 4$

$$10y - 2y = 8y - 4 = 4$$

3.  $9x + 5 + 2x - 3$

$$9x + 2x = 11x + 5 = 16x = 13$$

### Problem of the Lesson

1. For what value of  $x$  will  $5x - 3 = 32$  be true?

$$5x - 3 = 32 \quad 5x - 3 = 32$$

$$+3 \quad +3$$

2. For what value of  $n$  will  $3n + 4 = 6n - 11$  be true?

$$3n + 4 = 6n - 11$$

$$-3n \quad -3n$$

$$4 = 3n - 11$$

$$+11 \quad +11$$

$$15 = 3n$$

$$\div 3 \quad \div 3$$

$$5 = n$$

$$\frac{15}{3} = \frac{3n}{3}$$

$$5 = n$$

$$4 = 3n - 11$$

$$+11 \quad +11$$

$$15 = 3n$$

$$\div 3 \quad \div 3$$

$$5 = n$$

$$\begin{array}{r} 11 \\ + 0 \\ \hline 11 \end{array}$$