1. The Nemmers family has 12 trees in their yard. The Bradford family has *n* trees in their yard. Together, the families have 28 trees. How many trees do the Bradfords have?

$$12 + n = 28$$

A
$$n = 40$$
 trees

B
$$n = 38$$
 trees

$$\mathbf{C}$$
 $n=20$ trees

D
$$n = 16$$
 trees

2. Which equation can represent the following situation?

Barb had 35 books. Jean borrowed *n* books from Barb. Barb now has 27 books.

A
$$35 + n = 27$$

B
$$35 - n = 27$$

C
$$35 + 27 = n$$

D
$$n - 35 = 27$$

3. Writing to Explain You have learned how to find the value of an unknown number in an equation. This will make the equation true. Find the value of *n* in the equation below and then explain how you found this value. How do you know this value makes the equation true?

$$n - 9 = 5$$







Put ① 1 2 3 4 5 in a bag. Two players or two teams of two take turns.

Repeat for **Each Round** Pick 4 tiles. Display two 2-digit numbers.

Explain how to add those numbers on the hundred chart.

Put your tiles back in the bag for the next round.



		Ţ		Ŧ.	'	Т.	V T		$\sqrt{-}$		
	1	2	3	4	5	6	7	8	9	10	
Ŧ	11	12	13	14	15	16	17	18	19	20	
:	21	22	23	24	25	26	27	28	29	30	•
1	31	32	33	34	35	36	37	38	39	40	i
-	41	42	43	44	45	46	47	48	49	50	i
-1	51	52	53	54	55	56	57	58	59	60	
+	61	62	63	64	65	66	67	68	69	70	Ì
=	71	72	73	74	<i>7</i> 5	76	77	78	79	80	1
+	81	82	83	84	85	86	87	88	89	90	
اغ	91	92	93	94	95	96	97	98	99	100	7
	=	-	=	_	=	+ =	-	=	-	=	



Find many ways to get a sum of 50 by adding two numbers on the hundred chart.

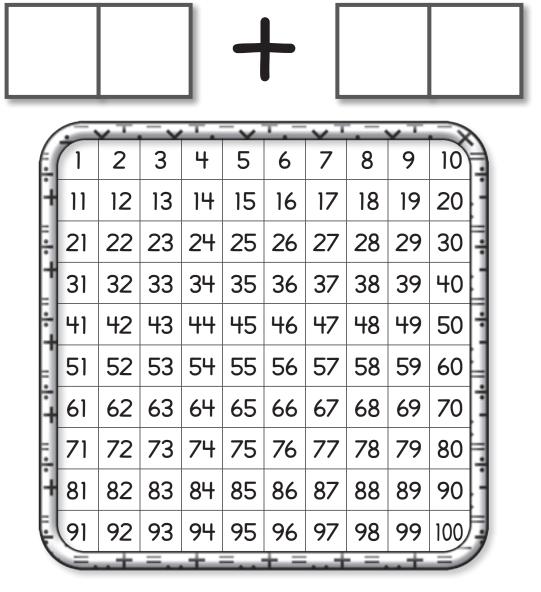






Put $\boxed{0}$ $\boxed{1}$ $\boxed{2}$ $\boxed{3}$ $\boxed{4}$ $\boxed{5}$ in a bag.

Repeat for Each Round Pick 4 tiles. Display two 2-digit numbers. Take turns until each team member explains a different way to add those numbers on the hundred chart. Put your tiles back in the bag for the next round.





Find many ways to get a sum of 100 by adding two numbers on the hundred chart.

Making Sense of Addition and Subtraction Equations

An **equation** is a number sentence that uses an equal sign (=) to show that the value to its left is the same as the value to its right.

12 + 4 = 16 is an example of an equation.

Some equations have letters in them or unknowns.

$$9 = n + 2$$

This equation means: 9 is equal to some number + 2

You can find the value of *n* that makes the equation true or equal on each side by thinking of addition or subtraction facts.

Think: You know that 7 + 2 = 9, so n = 7.

In 1-8, write a basic fact that is related to each equation. Then find the value for n that makes the equation true.

1.
$$18 = 9 + n$$

2.
$$n-4=2$$

3.
$$12 = 7 + n$$

4.
$$3 - n = 3$$

5.
$$14 = 6 + n$$

6.
$$n-5=6$$

7.
$$6 = 7 - n$$

8.
$$10 + n = 17$$

9. Critique Reasoning Fred decides that 12 + 40 = 62 is NOT a true equation. Is Fred correct? Explain.

Making Sense of Addition and Subtraction Equations

4-1A

In **1–8**, decide if the two sides are equal. If yes, write =. If no, write \neq (not equal).

2. 10 – 4
$$\bigcirc$$
 5

1.
$$9 \bigcirc 5 + 4$$
 2. $10 - 4 \bigcirc 5$ **3.** $23 + 6 \bigcirc 29$ **4.** $12 \bigcirc 14 - 1$

5. 9 + 2
$$\bigcirc$$
 7

5.
$$9+2\bigcirc 7$$
 6. $14\bigcirc 5+9$ **7.** $33\bigcirc 44-11$ **8.** $27-9\bigcirc 18$

In **9–16,** find the value for *n* that makes the equation true.

9.
$$16 = 7 + n$$

9.
$$16 = 7 + n$$
 10. $12 = n - 3$ **11.** $8 = 5 + n$ **12.** $n - 6 = 3$

11.
$$8 = 5 + r$$

12.
$$n-6=3$$

13.
$$7 + n = 7$$

14.
$$24 - n = 14$$

13.
$$7 + n = 7$$
 14. $24 - n = 14$ **15.** $n = 45 + 6$

16.
$$8 = 10 - n$$

For **17** and **18**, use the given equation to solve the problem.

17. Dina has 5 orchids. Mae has 13 orchids. How many more orchids does Mae have than Dina?

$$5 + n = 13$$

18. Juan collected 7 fewer stamps than Jenn. Juan collected 24 stamps. How many stamps did Jenn collect?

$$n - 7 = 24$$

- **19**. **Model** Derrick has 7 marbles. Roger has *n* marbles. Together they have 14 marbles. Write an equation to model the problem. How many marbles does Roger have?
- **20**. Which value for *n* makes the equation n + 8 = 45 true?

A
$$n = 37$$

A
$$n = 37$$
 C $n = 41$

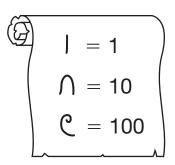
B
$$n = 38$$

B
$$n = 38$$
 D $n = 53$

Egyptian Addition

More than 5,000 years ago ancient Egyptians used a number system that was based on the number ten! Some of the symbols they used are shown at the right.

Here is how the Egyptians would have written 15 + 26 = 41.



 \cap IIIII

Write each number using our number system.

Then find each sum and draw the sum using Egyptian symbols.

1. \(\) \(\) \(\) \(\) \(\)

+

NNNN II

+

....

+

+

+

UU IIIIII

=

+

=