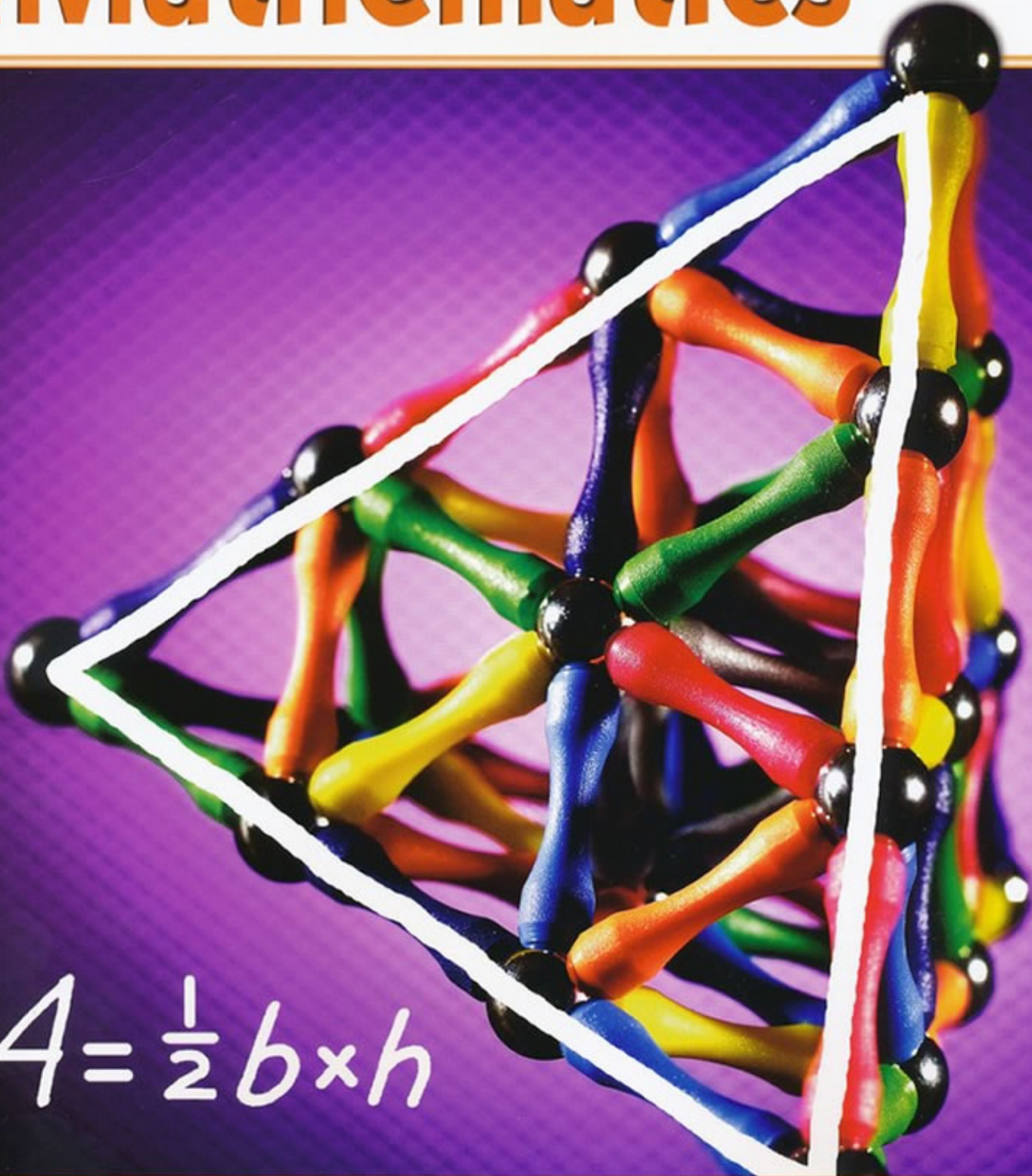


Level E

MCP Mathematics

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$$A = \frac{1}{2} b \times h$$

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Numbers and Place Value

Lesson 1-1

It's Algebra!

Addition and Subtraction Facts

The fifth-grade class has entered 13 animals in the school pet show. Write two addition and two subtraction equations using the numbers of puppies, kittens, and pets.

We are looking for the two addition and two subtraction facts that make a **fact family**.

We know the sum or total number of pets in the show is _____.

There are _____ puppies and _____ kittens entered.

To write the addition facts, we add the **addends**, _____ and _____.

$$\begin{array}{ccc} 8 + 5 = \underline{\quad} \\ \uparrow \quad \uparrow \quad \uparrow \\ \text{puppies} \quad \text{kittens} \quad \text{pets} \end{array}$$

$$\begin{array}{ccc} 8 + 5 = \underline{\quad} \\ \uparrow \quad \uparrow \quad \uparrow \\ \text{addends} \quad \text{sum} \end{array}$$

To write the subtraction facts, we subtract _____ and _____ from the total number of pets.

$$\begin{array}{ccc} 13 - 5 = \underline{\quad} \\ \uparrow \quad \uparrow \quad \uparrow \\ \text{pets} \quad \text{kittens} \quad \text{puppies} \end{array}$$

$$\begin{array}{ccc} \text{subtrahend} \\ \downarrow \\ 13 - 5 = \underline{\quad} \\ \uparrow \quad \uparrow \\ \text{minuend} \quad \text{difference} \end{array}$$

The fact family for 5, 8, and 13 is made of two _____ facts and two _____ facts.

$$\begin{array}{r} 8 \\ + 5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ + 8 \\ \hline \end{array} \quad \begin{array}{r} 13 \\ - 5 \\ \hline \end{array} \quad \begin{array}{r} 13 \\ - 8 \\ \hline \end{array}$$

Getting Started

Write the fact family for each set of numbers.

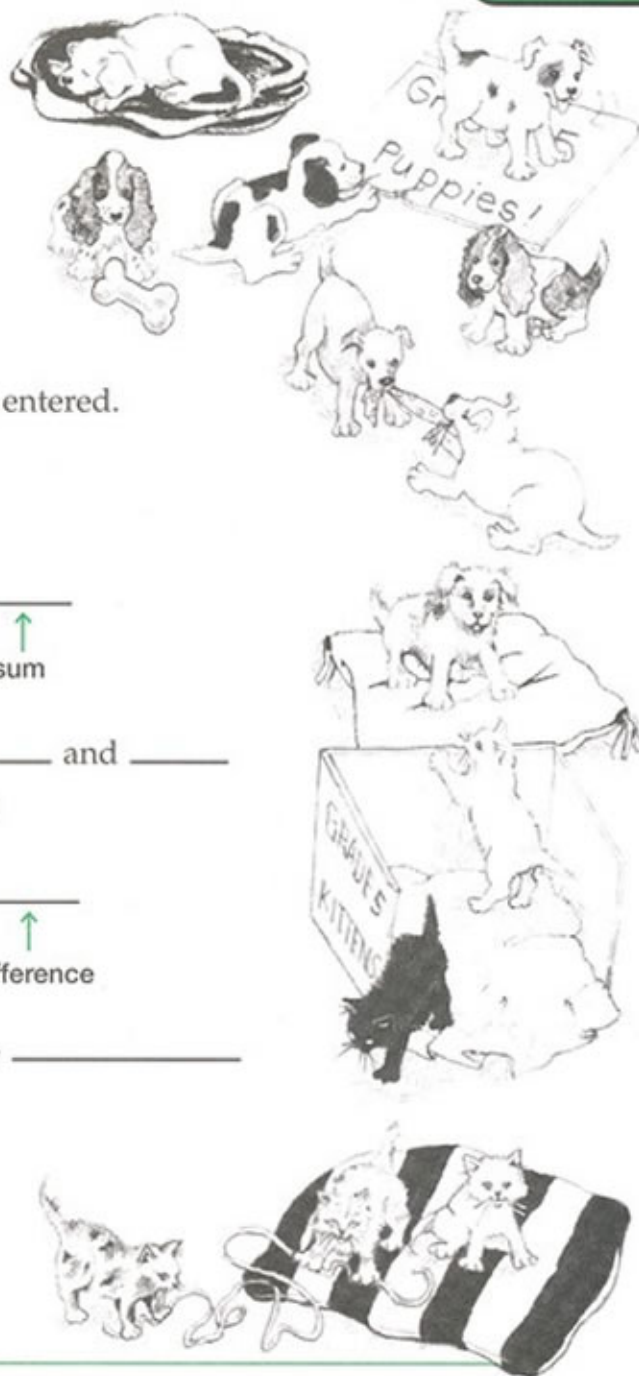
1. 2, 4, 6

2. 7, 15, 8

Add or subtract.

3. $16 - 9 = \underline{\quad}$

4. $\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$



Practice

Write the fact family for each set of numbers.

1. 3, 4, 7

2. 2, 9, 7

3. 6, 7, 13

4. 8, 0, 8

5. 12, 5, 7

6. 9, 17, 8

7. 7, 1, 8

8. 11, 6, 5

Add or subtract.

9. $7 + 2 =$ _____

10. $3 + 1 =$ _____

11. $11 - 5 =$ _____

12. $14 - 7 =$ _____

13. $7 + 6 =$ _____

14. $8 - 5 =$ _____

15. $8 + 0 =$ _____

16. $10 - 8 =$ _____

17. $15 - 8 =$ _____

18. $9 + 6 =$ _____

19. $5 + 9 =$ _____

20. $16 - 8 =$ _____

21.
$$\begin{array}{r} 11 \\ - 8 \\ \hline \end{array}$$

22.
$$\begin{array}{r} 8 \\ + 7 \\ \hline \end{array}$$

23.
$$\begin{array}{r} 10 \\ - 4 \\ \hline \end{array}$$

24.
$$\begin{array}{r} 9 \\ - 0 \\ \hline \end{array}$$

25.
$$\begin{array}{r} 10 \\ - 7 \\ \hline \end{array}$$

26.
$$\begin{array}{r} 1 \\ + 5 \\ \hline \end{array}$$

27.
$$\begin{array}{r} 6 \\ + 6 \\ \hline \end{array}$$

28.
$$\begin{array}{r} 9 \\ - 3 \\ \hline \end{array}$$

29.
$$\begin{array}{r} 10 \\ - 7 \\ \hline \end{array}$$

30.
$$\begin{array}{r} 15 \\ - 6 \\ \hline \end{array}$$

31.
$$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$$

32.
$$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$$

33.
$$\begin{array}{r} 6 \\ + 9 \\ \hline \end{array}$$

34.
$$\begin{array}{r} 6 \\ - 1 \\ \hline \end{array}$$

35.
$$\begin{array}{r} 12 \\ - 6 \\ \hline \end{array}$$

36.
$$\begin{array}{r} 7 \\ + 5 \\ \hline \end{array}$$

37.
$$\begin{array}{r} 9 \\ + 9 \\ \hline \end{array}$$

38.
$$\begin{array}{r} 2 \\ + 6 \\ \hline \end{array}$$

39.
$$\begin{array}{r} 4 \\ + 9 \\ \hline \end{array}$$

40.
$$\begin{array}{r} 9 \\ - 1 \\ \hline \end{array}$$

41.
$$\begin{array}{r} 7 \\ + 3 \\ \hline \end{array}$$

42.
$$\begin{array}{r} 8 \\ - 8 \\ \hline \end{array}$$

43.
$$\begin{array}{r} 11 \\ - 4 \\ \hline \end{array}$$

44.
$$\begin{array}{r} 6 \\ + 5 \\ \hline \end{array}$$

45.
$$\begin{array}{r} 1 \\ + 0 \\ \hline \end{array}$$

46.
$$\begin{array}{r} 14 \\ - 5 \\ \hline \end{array}$$

47.
$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

48.
$$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$$

49.
$$\begin{array}{r} 10 \\ - 1 \\ \hline \end{array}$$

50.
$$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$$

Addition Properties

It's Algebra!

Addition properties are like special tools.
They make it easier to work with numbers.

Commutative Property

You can add in any order.

$5 + 2 = 7$

$2 + 5 = 7$

$3 + 6 + 7 = \underline{\hspace{2cm}}$

$7 + 3 + 6 = \underline{\hspace{2cm}}$

Associative Property

You can change the grouping.

REMEMBER Add the numbers in parentheses first.

$(6 + 3) + 5 = 14$

$6 + (3 + 5) = 14$

$(8 + 2) + 4 = \underline{\hspace{2cm}}$

$8 + (2 + 4) = \underline{\hspace{2cm}}$

Identity Property

Adding zero does not change a number.

$7 + 0 = 7$

$0 + 7 = 7$

$0 + 1 = \underline{\hspace{2cm}}$

$8 + 0 = \underline{\hspace{2cm}}$

Here are some other useful things to know about zero.

Subtracting zero does not change a number.

$9 - 0 = 9$

$7 - 0 = \underline{\hspace{2cm}}$

Subtracting a number from itself leaves zero.

$8 - 8 = 0$

$3 - 3 = \underline{\hspace{2cm}}$

Adding and subtracting are **inverse operations**.

You can subtract to check addition.

$15 - 9 = 6 \text{ because } 6 + 9 = 15$

$12 - 7 = \underline{\hspace{2cm}} \text{ because } \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

REMEMBER Solving for n is finding the value for n in an equation.

Getting Started

Solve for n .

1. $0 + 0 = n$

$n = \underline{\hspace{2cm}}$

2. $0 + 6 = n$

$n = \underline{\hspace{2cm}}$

Subtract. Check by adding.

3. $\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$

4. $\begin{array}{r} 12 \\ - 7 \\ \hline \end{array}$

5. $\begin{array}{r} 18 \\ - 9 \\ \hline \end{array}$

Add. Check by grouping the addends another way.

6. $\begin{array}{r} 5 \\ 3 \\ + 4 \\ \hline \end{array}$

7. $\begin{array}{r} 2 \\ 6 \\ + 3 \\ \hline \end{array}$

8. $\begin{array}{r} 6 \\ 3 \\ + 4 \\ \hline \end{array}$

9. $(5 + 2) + 6 = n$
 $n = \underline{\hspace{2cm}}$

10. $(5 + 1) + 6 = n$
 $n = \underline{\hspace{2cm}}$