

Section 7.R.2 Addition and Subtraction with Whole Numbers

Go to Section 7.R.2 Learn mode in Hawkes to follow along!

Addition with Whole Numbers

Adding Whole Numbers

1. Write the numbers _____ so that the _____
2. Add only the _____

Carrying When Adding Whole Numbers

If the sum of the digits in one column is more than 9,

1. write the _____
2. carry the _____ as a number to be added to _____

▶ Example 4 Application: Adding Whole Numbers

Stan bought a television set for \$859, a stereo for \$697, and a computer for \$1285. What total amount did he spend?

Solution

Name:

Date:

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Exercises

Add.

$$\begin{array}{r} 1. \quad 24 \\ +54 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 165 \\ \quad 276 \\ +394 \\ \hline \end{array}$$

$$2. \quad 18 + 56$$

$$5. \quad 86 + 32 + 142 + 75$$

$$\begin{array}{r} 3. \quad 6530 \\ +9542 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 124,564 \\ \quad 345,025 \\ +1,671,000 \\ \hline \end{array}$$

7. Theo is keeping track of how many visitors his website receives each day. The website receives 858 visitors on the first day, 723 visitors on the second day, and 1055 visitors on the third day. How many visitors did Theo's website receive during those three days?

The Properties of Addition

Variable

A variable is a symbol (generally a letter of the alphabet) that is _____

Commutative Property of Addition

For any whole numbers a and b , _____

(The **order** of the numbers in addition can _____)

Associative Property of Addition

For any whole numbers a , b , and c , _____

For example, _____

(_____)

Additive Identity Property

For any whole number a , _____

For example, _____

(The sum of a number and 0 is _____)

The number 0 is called the _____

Example 5 Recognizing the Properties of Addition

Each of the properties of addition is illustrated.

a. $40 + 3 = 3 + 40$

b. $2 + (5 + 9) = (2 + 5) + 9$

c. $86 + 0 = 86$

Name:

Date:

4

Exercises

For each statement, state the property of addition illustrated and show that the statement is true by performing the addition.

8. $(2 + 3) + 4 = (3 + 2) + 4$

10. $(8 + 7) + 3 = 8 + (7 + 3)$

9. $(8 + 1) + 3 = (1 + 8) + 3$

11. $7 + (6 + 0) = 7 + 6$

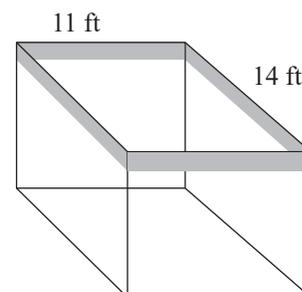
Calculating the Perimeter of a Polygon

The **perimeter** of a geometric figure is _____

▣ Example 7 Application: Calculating the Perimeter of a Rectangle

Barbara is redecorating and wants to put a wallpaper border around the top edge of her dining room. The dining room is in the shape of a rectangle and the dimensions are 11 ft by 14 ft. How many feet of wallpaper border will she need?

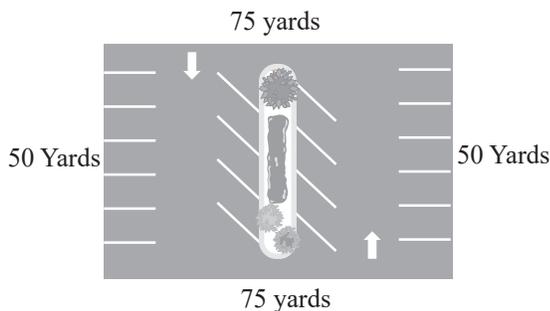
Solution



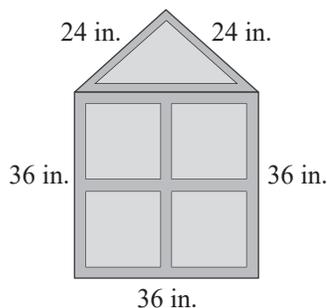
Exercises

Solve.

12. Find the perimeter of a parking lot that is in the shape of a rectangle 50 yards wide and 75 yards long.



13. A window is in the shape of a triangle placed on top of a square. The length of each of two equal sides of the triangle is 24 inches and the third side is 36 inches long. The length of each side of the square is 36 inches long. Find the perimeter of the window.



Subtraction with Whole Numbers

Subtraction

Subtraction is the operation of _____

The difference is the result of _____

Subtracting Whole Numbers

1. Write the numbers _____ so that the _____
2. Subtract only the _____
3. Check by _____
4. The sum must be the _____

▶ Example 10 Subtracting Whole Numbers by Borrowing

Subtract: $742 - 259$

Solution

Name:

Date:

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Exercises

Subtract.

$$\begin{array}{r} 14. \quad 42 \\ \quad -31 \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 3275 \\ \quad -1744 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 74 \\ \quad -29 \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 5070 \\ \quad -4376 \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 139 \\ \quad -67 \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad 8,000,000 \\ \quad -647,561 \\ \hline \end{array}$$

20. The Kingston Construction Co. made a bid of \$7,350,000 to build a stretch of freeway, but the Beach City Construction Co. made a lower bid of \$6,870,000. How much lower was the Beach City bid?