

Using Variables to Write Expressions

A variable represents a quantity that can change. To use a variable to write an algebraic expression for a situation, you need to decide which operation is appropriate for the situation. To help you, some words and phrases are listed below.

Word phrase	Variable	Operation	Algebraic Expression
ten more than a number b	b	Addition	$b + 10$
the sum of 8 and a number c	c		$8 + c$
five less than a number d	d	Subtraction	$d - 5$
15 decreased by a number e	e		$15 - e$
the product of 8 and a number f	f	Multiplication	$8f$
19 times a number g	g		$19g$
a number h divided by 2	h	Division	$h \div 2$
a number i divided into 50	i		$50 \div i$

Write each algebraic expression.

1. a number k **divided by** 6

Identify the operation. _____ Write the expression. _____

2. the **sum** of 8 and a number q _____ 3. 5 **times** a number b _____

4. a number j **divided into** 3 _____ 5. 7 **less than** a number d _____

6. n fewer carrots than 12 _____ 7. w lunches at \$9 each _____

8. A touchdown scores 6 points. Write an algebraic expression to represent the number of points the Hawks will score from touchdowns.

Identify the operation _____ Write the expression. _____

9. Write an algebraic expression to represent the situation below. Explain how the expression relates to the situation.

Some children share 6 oranges equally among themselves.
