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		$19g$
the quotient of 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 j **divided by** 5

Identify the operation. _____   Write the expression. _____

2. the **sum** of 2 and a number k _____   **3.** 6 **times** a number m _____

4. a number n **divided into** 9 _____   **5.** 4 **less than** a number p _____

6. q fewer limes than 10 _____   **7.** r tickets at $7 each _____

8. A field goal scores 3 points. Write an algebraic expression to represent the number of points the Raiders will score from field goals.

Identify the operation _____   Write the expression. _____

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

Some children share 5 apples equally among themselves.

_____

_____