Expressions and Equations

Vocabulary

Expression	A number or a meaningful collection of operations (+,-,·,÷) and numbers
	Examples of expressions: $3 + 7$ $12 - 2$ $8 \cdot 5 \div 4$ $3^2 \div (2+1) + 7$
Evaluate	To determine the value of the expression
Equation	Two expressions connected by an equal sign
	Examples of equations: $3 + 7 = 12 - 2$ $8 \cdot 5 \div 4 = 3^2 \div (2+1) + 7$
Statement	An equation that can be judged to be either True or False
	$3 + 7 = 12 - 4$ is a FALSE statement. $3 + 7 = 12 - 2$ is a TRUE statement.

TRY: Identify each of the following as an expression or an equation. (Check the appropriate column.)

	Expression	Equation	If it is an equation, is it True or False?
$2 \cdot 5^3$			
$3^2 \div (2+1) + 7 = 12 - 2$			
$(8 \cdot 5 \div 4)^2 = (5 \cdot 4 \div 2)$			
$(8 \cdot 5 \div 4)^2 + (5 \cdot 4 \div 2)$			

TRY: For each of the following, translate the sentence into an equation then determine if the equation is a True statement or a False statement.

Sentence	Equation	True or False?
Three plus six is two more than seven.		
Four squared less nine is five.		
Five times the sum of one plus three is the same as the product of two and ten.		
The difference of seventeen and thirteen is the quotient of thirty-six and nine.		
Thirty less six is twelve squared.		