Write an algebraic expression for each phrase below.

4 more than a number t

_____

8 fewer than a number x

_____

the product of 10 and a number s

_____

a number h divided by 6

_____

the sum of 9 and a number f

_____

a number n divided into 100

_____

A local movie theater has 30 seats in each row. The balcony can seat an additional 50 people. On the lines below, choose and define a variable. Then write and explain an expression that shows how many people can be seated in the movie theater.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Algebra

Using Variables to Write Expressions

Name:

[_____]

What is a variable?
Quantities that change are called variables.
They are usually shown by symbols such as lower case letters.

Look at each table and determine the rule (or pattern) between the first and second numbers. Write the expression that describes the rule and complete the tables.

First Number	Second Number
1	3
2	6
3	9
4	12
5	15
k	

Rule: _____

First Number	Second Number
1	6
2	7
3	8
4	9
5	10
c	

Rule: _____

Identify the operation (*addition, subtraction, multiplication* or *division*) and write the expression.

b less grapes than 14

Operation: _____

Expression: _____

x suckers at 25¢ each

Operation: _____

Expression: _____

g children sharing 10 apples

Operation: _____

Expression: _____

k more pencils than 14

Operation: _____

Expression: _____

Use the variables a and b to write the formula for the perimeter of triangle DEF.
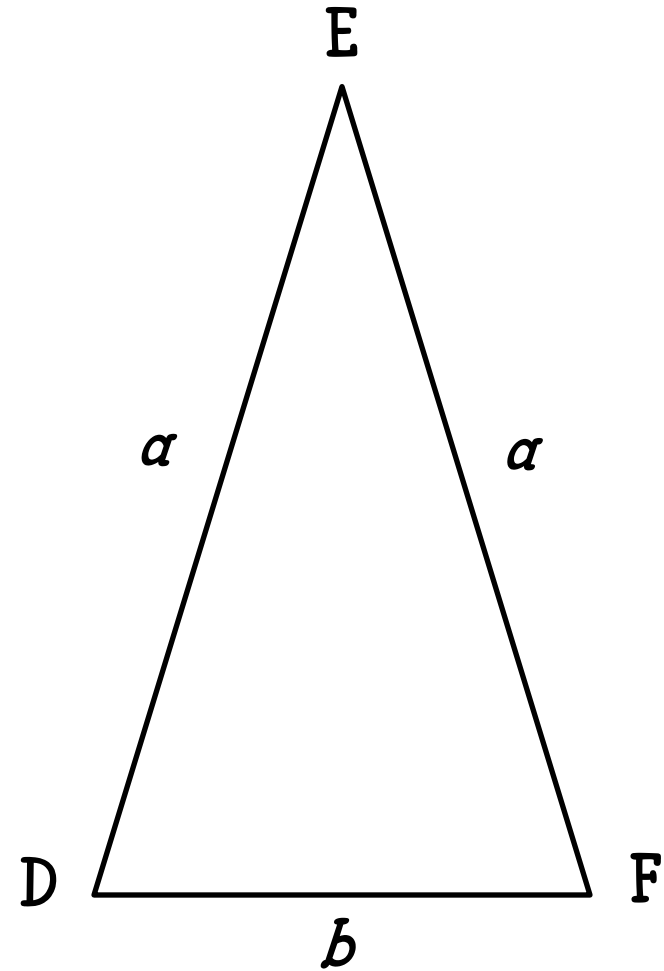
Let a = length of side DE
Let a = length of side FE
Let B = length of side DF

Perimeter = _____