As you look around your classroom, you may see many things that could be counted or measured. To increase the efficiency of the custodial crew, the head custodian, Mr. Parkes, decided to think about all the components that affect the way the classroom runs. To make it easy, he assigned symbols for each count or measurement that he wanted to consider, and made the following table:

Symbol	Meaning (description of what the symbol means in context)
D_s	Number of student desks in classroom
C_d	Cost of each student desk
D_t	Number of teacher desks in classroom
R	Number of rows of student desks
L	Number of lights
C_L	Cost of each light bulb
W	Number of whiteboards
C_w	Cost of each whiteboard
P	Number of pens
C_P	Cost of each pen
p	Number of pencils

1.   Write an expression for the total number of desks in a classroom.

2.   Write an expression for the total cost to replace all of the lights in the classroom.

3.   Write an expression for the cost of replacing 13 student desks in the classroom.

4.   Write an expression for the number of student desks per row.

5.   Write an expression for how many more light bulbs there are than teacher desks.

6.   Write an expression to represent the cost of 7 pens.

Using the given symbols from the front page, it is possible to write many different algebraic expressions. Some expressions have meaning and other expressions have no meaning. Using the above symbols determine what each expression would mean. If the expression has no meaning, write "no meaning".
   (It may be helpful to put numbers in and think about what the operations would create.)

7. **P + p**   8. **P(p)**

9. **W+C$_w$**   10. **W(C$_w$)**

11. $\dfrac{W+L}{2}$ 12. $\dfrac{Ds}{R}$

In Vernal, there is a movie theatre that only shows one movie per day. They only sell one size of drink and one size of popcorn. Given the following table, create a symbol (variable) to represent each topic:

Topic	Your Symbol (variable)
Number of children at the movie theatre	
Cost for an adult movie ticket	
Number of popcorn containers sold (one size only)	
Number of adults at the movie theatre	
Number of drink cups sold (one size only)	
Cost for a child movie ticket	
Cost to buy one container of popcorn	
Cost to buy one drink	

13.   Write an expression for the total number of people at the movie theatre.

14.   Write an expression for the total amount of money that the theatre collects on drinks per day.

15.   Write an expression that doesn't make sense and explain why it has no meaning.

16.   Imagine you are going on a road trip with your family. How far would you travel? How long would it take? How fast would the car be going? Let D represent the distance, T represent the time and R represent the speed of the car. Write an equation that relates all of these values to each other.