6.EE Introducing Equivalent Expressions 1

Task

a. Evaluate each of the following expressions:
   i. $2(4 - 3)^2$
   ii. $2(6 - 3)^2$
   iii. $2(8 - 3)^2$

b. In the expressions above, what parts are always the same? What part changes?

c. We can write an expression to represent all of the expressions above if we use a letter for the part that changes. Write an expression using the letter $x$ that could represent all of the numeric expressions above.

d. What value of $x$ would make your expression evaluate to 98?