

Indicators

Objective:

5.02 Use and evaluate algebraic expressions.

Vocabulary and Resources

combining like terms

coefficient

variable

equivalent expressions

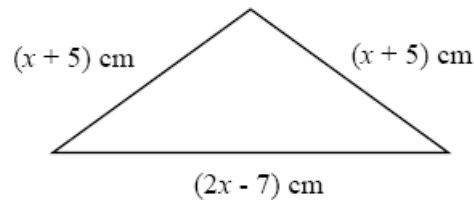
exponents

operations with exponents (x and \div)

order of operations

A. Jeff was told that he is allowed to check a maximum of w pounds of luggage on an airplane. If one of his bags weighs 55 pounds, write an expression to represent the amount of additional weight he can check.

B. Give a simplified expression to represent the perimeter of the figure below. If x has a value of 22, what is the perimeter of the figure?



C. Evaluate each of the following expressions if $m = 5$, $x = 7$, and $y = 12$.

a) $6.5(m + y)$

b) $\frac{10x + m}{y}$

c) $18 \div y + x$

d) $\frac{15m - 3y}{x + 6}$

e) $5(y - m)$

f) $49 \div (x + m)$

g) $15xy$

D. Vernon wants to buy 3 CD's and 2 DVD movies. Write an expression that represents the amount of money Vernon needs if c is the cost of one CD and m is the cost of one DVD movie. If each CD costs \$18 and each DVD movie costs \$22, what will be the total cost?