

August 17, 2015



Complete the Standards Review:

1. Sammie can run 1 mile every 10 minutes, how many feet per second is this?
2. Sixty miles per hour is how many feet per second?

Essential Question:
How are verbal phrases translated into algebraic expressions?

Aug 7-2:05 PM

Today's CCGPS Standards

MCC9-12.A.SSE.1 Interpret expressions that represent a quantity in terms of its context.
MCC9-12.A.SSE.1a Interpret parts of an expression, such as terms, factors, and coefficients.

Apr 24-12:33 PM

A smartphone is on sale for 25% off its list price. The sale price of the phone is \$149.25. The expression used to represent the list price of the smartphone is $149.25 + 0.25x$.

$$\underbrace{149.25}_{\text{Term}} + \underbrace{0.25x}_{\text{Term}}$$

Factors: 0.25 and x

Coefficient: 0.25

Constant: 149.25



Aug 4-7:23 AM

Tara and two friends had dinner at a Spanish tapas restaurant that charged \$6 per tapa, or appetizer. The three of them shared several tapas. The total bill included taxes of \$4.32. What are the terms, factors, and coefficients of the algebraic expression that represents the number of tapas ordered?

Algebraic Expression: $6n + 4.32$

Terms: $6n$ and 4.32

Factors: 6 and n

Coefficient(s): 6

Constant: 4.32

Aug 5-5:32 PM

Helen purchased 3 books from an online bookstore and received a 20% discount. The shipping cost was \$10 and was not discounted. Write an expression that can be used to represent the total amount Helen paid for 3 books plus the shipping cost. Identify each term, coefficient, constant, and factor of the expressions described.

Algebraic Expression: $3x - 0.20(3x) + 10$ or $2.4x + 10$

Terms: $2.4x$ and 10

Factors: 2.4 and x

Coefficient(s): 2.4

Constant: 10

Aug 5-6:56 PM

The surface area of a cylinder with radius r and height h is twice the product of π and the square of the radius plus twice the product of π , the radius, and the height.

Algebraic Expression: $2\pi r^2 + 2\pi rh$

Terms: $2\pi r^2$ and $2\pi rh$

Factors: 2, π , r^2 and 2, π , r , h

Coefficient(s): 2 and 2

Constant: none

Aug 5-5:46 PM

Practice Problems

1. Gavin agrees to buy a 6-month package deal of monthly gym passes, and in turn receives a 15% discount. Write an algebraic expression to represent the total cost of the monthly passes with the discount, if x represents the cost of each monthly pass.

Algebraic Expression: $6x - 15(6x)$ or $5.10x$

Terms: $5.10x$

Factors: 5.10 and x

Coefficients: 5.10

Constants: none

Aug 7-2:03 PM

2. Andre purchased 10 cans of tennis balls from an online store and received a 25% discount. Shipping cost \$5.99. Write an algebraic expression to represent the total cost of the tennis balls with the shipping cost, if x represents the cost of each can.

$$10x - 25(10x) + 5.99 \text{ or } 7.50x + 5.99$$

Algebraic Expression:

Terms: $7.50x$ and 5.99

Factors: 7.50 and x

Coefficients: 7.50

Constants: 5.99

Aug 7-2:08 PM

3. The area of a trapezoid can be found by multiplying the height of the trapezoid by half of the sum of base₁ and base₂.

Algebraic Expression: $\frac{1}{2}h(b_1 + b_2)$ Terms: $\frac{1}{2}h(b_1 + b_2)$

Factors: $\frac{1}{2}$, h , and $(b_1 + b_2)$ Coefficients: $\frac{1}{2}$

Constants: none

Aug 7-2:12 PM



Complete Worksheet
and Student
Information Sheet

Aug 5-5:59 PM