Name: _____ Date: _____

Identifying Parts of Easy & Complicated Expressions Practice

Sara and two friends had dinner at a Spanish tapas restaurant that charges $6 per tapa, or appetizer. The three of them shared several tapas. The total bill included taxes of $4.32.

1. What was the cost of each tapa without including taxes? $6
2. What variable can be used to represent the number of tapas ordered? n, x, t
3. What algebraic expression can be used to represent the cost of the tapas at $6 each, not including taxes? 6n
4. What algebraic expression can be used to represent the cost of the tapas ordered including taxes? 6n + 4.32
5. How many terms does the expression from question 4 include? two terms
6. What are the terms? 6n, 4.32
7. What are the coefficients of each term? 6 What is the constant? 4.32

Andre purchases 10 cans of tennis balls from an online store and received a 25% discount. Shipping cost $5.99.

8. What algebraic expression can be used to represent the total cost of tennis balls purchased, if x represents the cost of each can? 10x
9. What algebraic expression can be used to represent the total cost of tennis balls purchases that includes the 25% discount? 10x − .25(10x) or .75(10x)
10. What algebraic expression can be used to represent the cost of the cans of tennis balls ordered with the 25% discount and including shipping? 10x − .25(10x) + 5.99
11. How many terms does the expression from question 10 include? three
12. List the terms. 10x, −.25(10x), 5.99
13. What are the coefficients of each term? 10, −2.5 What is the constant? 5.99

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Identifying Parts of Expressions Homework

1. Identify each term, coefficient, and constant in $5x^2 + 3x + 12$.

$5x^2, 3x, 12$ — $5, 3$ — 12

2. Write an expression with 4 terms, containing the coefficients 3, 6, and 9.

$3x^3 + 6x^2 + 9x + 12$

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

$6x - .15(6x)$

4. A smartphone is on sale for 25% off of its list price. The shipping cost is $10. What expression can be used to represent the total cost of the smartphone? Let x represent the list price of the phone. Identify each term, coefficient, constant, and factor of the expression described.

$x - .25x + 10 = .75x + 10$

5. Allie and some friends went to a movie. Their total cost was $30.24, which included taxes of $2.24. Write an algebraic expression to represent the price of each movie ticket, not including taxes. Let x represent the number of Nadia's friends that went to the movies.

$\frac{(30.24 - 2.24)}{x} = \frac{28}{x}$

6. Stephanie wants to buy some purses that are on sale for 30% off the original price of $120. The shipping cost is $15. Write an algebraic expression to represent the total cost of the purses. Let x represent the number of purses she is buying.

$120x - .30(120x) + 15$

Translations

Translate each verbal expression to an algebraic expression.

6. Eight more than 3 times a number $3x + 8$
7. The difference of 10 and a number $10 - x$
8. The quotient of 12 and a number $12 / x$
9. 15 less than twice a number $2x - 15$
10. Three-fourths the square of a number $\frac{3}{4}x^2$
11. The product of 5 and the cube of a number increased by the difference of 6 and x $5x^3 + (6 - x)$
12. Half the sum of x and y decreased by one-third of y $\frac{x+y}{2} - \frac{y}{3}$