667. What is the value of y when $x = 3$ and $y = 5 + 4x$?

a. 6
b. 9
c. 12
d. 17

668. What is the value of the expression $\frac{xy + yz}{xy}$ when $x = 1, y = 3$ and $z = 6$?

a. 3
b. 7
c. 12
d. 21

669. Which of the following is an example of the Associative Property of Multiplication?

a. $a(b + c) = ab + ac$
b. $ab = ba$
c. $a(bc) = (ab)c$
d. $a \times 1 = a$

670. What is the greatest common factor of the following monomials? $3x^2, 12x, 6x^3$

a. 12
b. $3x$
c. $6x$
d. $3x2$

671. Which value of x will make this number sentence true? $x + 25 \leq 13$

a. -13
b. -11
c. 12
d. 38

672. $\frac{x}{4} + \frac{3x}{4} =$

a. $\frac{1}{2}x$
b. $\frac{x^3}{4}$
c. 1
d. x

666. **c.** One of the most vital steps in solving for an unknown in any algebra problem is to isolate the unknown on one side of the equation.

667. **d.** Substitute 3 for x in the expression 5 plus $4x$ to determine that y equals 17.

668. **b.** Substitute the values of each letter and simplify. The expression becomes $\frac{(1)(3) + (3)(6)}{(1)(3)}$ which simplifies to $\frac{3 + 18}{3}$ after performing multiplication. Add 3 + 18 in the numerator to get $\frac{21}{3}$, which simplifies to 7.

669. **c.** The Associative Property of Multiplication shows that even though the grouping of the numbers changes, the result is the same. Choice **c** changes the grouping of the numbers by placing different variables within the parentheses, while both sides of the equation remain equal.

670. **b.** To find the greatest common factor of $3x^2$, $12x$, and $6x^3$ first start with the coefficients, or numbers in front of the variables. The largest number that divides into 3, 6, and 12 without a remainder is 3. With the variables, the smallest exponent on x is 1, so x^1, or x, is the largest variable factor. Therefore, the greatest common factor of all three terms is $3x$.

671. **a.** Since the solution to the problem $x + 25 = 13$ is -12, choices **b**, **c**, and **d** are all too large to be correct.

672. **d.** The first step in solving this problem is to add the fractions to get the sum of $\frac{4x}{4}$. This fraction reduces to x.