1. $10^2 \times 10^4 =$

   a. 10^8
   b. 100
   c. 10^6
   d. 10^2

2. $4 (x - 2) - 5 + 3(x - 1) =$

   a. $x - 13$
   b. $7x + 10$
   c. $7x - 16$
   d. $7x$

3. $-4x + x =$

   a. $-4x^2$
   b. -4
   c. $-4-x$
   d. $-3x$

4. $10^9 \div 10^6 =$

   a. 1,000
   b. 10^{15}
   c. 100
   d. 1^3

5. $\frac{6y^4 - 18y^2 + 9y^2}{3y^2}$

   a. $6y^4 - 18y^3 + 3$
   b. $2y^2 - 6y + 3$
   c. $3y^2 - 15y + 6$
   d. $2y^6 - 6y^5 + 3y^4$

6. $5(x - y) + 5(x + y) =$

   a. $10x + 10y$
   b. $10x$
   c. $10x - 10y$
   d. None of the above

7. $\frac{6x^3y^4z^3}{3x^2y^6z}$

   a. $2y^2$
   b. $2xz^2$
   c. $2xz^2/y^2$
   d. y^2

8. $3^2 \times 10^3$

   a. 30^6
   b. 9
   c. 9,000
   d. None of the above

9. $6(x - 3) - 9(x + 2) =$

   a. $-15x - 36$
   b. $-3x -36$
   c. $3x + 36$
   d. $-3x - 18$

10. Which of these equations is equal to $y = mx + b$?

    a. $x = y/m + b$
    b. $b = mx/y$
    c. $m = x/y + b$
    d. None of the above

11. Which of these equations represents 9 less than 3 times a number squared?

    a. $9 - 3n$
    b. $(3n)^2 - 9$
    c. $9 - 3n^2$
    d. $3n - 9$

12. Which of these equations represents 7 more than a number squared divided by 2?

    a. $7 + n^2/n$
    b. $7/2 + n^2$
    c. $7 + n^2/2$
    d. None of the above

13. A mason can set 95 bricks in 2 hours and it takes 1,500 bricks to cover a wall. Which equation represents how long it will take the mason to finish the wall?

    a. 1,500 x 95
    b. 1,500 ÷95/2
    c. 1,500 ÷95
    d. None of the above

14. If a business borrows $8,000 at a simple interest rate of 8%, which equation shows how much interest will be paid out over 5 years?

    a. I = 8,000/5 x .08
    b. I = 8,000 x .08 x 5
    c. I = 8,000 x 8 x 5
    d. None of the above

15. Which of these statements is true about the number that goes in the box?
    1,000 x □ = 699

    a. The number is less than .06
    b. The number is greater than .07
    c. The number is less than 0.7 but greater than .06
    d. None of the above

16. Which number goes in the box to make this statement true?
    60 x □= .006

    a. .1
    b. .01
    c. .001
    d. .0001

17. Which of these equations completes the number line? 1, 5, 13, 29, ___, 125

    a. $2x + 2$
    b. $2x - 2$
    c. $2x/3$
    d. $(2x) + 3$

18. This table shows input numbers changed by a constant that shows output numbers. What output number is represented by the input number of 120?

10	20	30	50	120
3	8	13	23	

    a. 18
    b. 33
    c. 58
    d. 7

Answer Key

1. C
2. C
3. D
4. A
5. B
6. B
7. C
8. C
9. B
10. D
11. B
12. C
13. B
14. B
15. C
16. D
17. D
18. C