Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

**Chemistry: *The Mathematics of Chemistry***

***Complete the following calculations. Include units on your answers.***

1. (127 m)

 (23 s)

2. (5.22 m) (4.29 m)

3. 34 cm + 21 cm + 8 cm

4. (0.45 mm) (0.28 mm) (0.85 mm)

5. (10 kg) (30 m)

 (5 s)

6. 1.3 moles

 3.4 L

7. (75 kg) (5.25 m)

 (2.5 s) (6.3 s)

8. (56 N) (2.5 m)

9. (1.27 J + 0.22 J)

 (116 g) (4.8oC)

10. (7.54 N) (0.246 m)

 (0.672 s)

11. (8.13 kg)

 (0.452 cm) (0.550 cm)

12. 54.0 g

 4.10 L

13. 26 008 J

 125 g

14. (645 atoms) (2.00)

***Simplify the following expressions.***

15. 5 (5w – 4w)

 10

16. 1304 x 7.631 x 4.000

 (521.2) (0.4998)

17. 6a x 5b2

 3a3

18. (3.28d) (4.83d) (0.250)

19. (2a – 3b) (3b)

 (3c) (c)

20. (4f + 13g) (2w)

***Solve each of the following expressions for x. (x = ??)***

21. 2x – 14 = 8

22. 4x – 2z = 3y + 8 *(if y = 12 and z = –3)*

23. H = WQx

24. x + 12 = 23FG

25. 18KRx = E

 F2

26. T = LxS

27. 15G – x = U

28. Y = T + 6

 x

29. B2H5x = T3K

 E4R Y