Operations with Polynomials

Chapter 1A Practice Assignments
(Concepts 1-5)

Intermediate Algebra

Name: _____ Hr: ____

Concept 1: Write each as an algebraic expression.

1. the product of 9 and 7

2. 25 less than n

3. a number squared

4. 7 more than 12

5. the quotient of 16 and 8

6. twice n

7. 4 cubed

8. the sum of 8 and 11

9. half of p

10. 21 decreased by a number

11. r increased by 9

12. 6 squared

13. the product of 12 and 8

14. the difference of 29 and b

Concept 2: Find each sum.

15. $7 + 4$

16. $1 + 6$

17. $5 + 3$

18. $8 + 3$

19. $(-8) + 4$

20. $5 + (-8)$

21. $(-5) + (-8)$

22. $(-2) + (-4)$

23. $1 + (-8)$

24. $8 + (-1)$

25. $(-3) + 5 + (-2)$

26. $3 + (-2) + 1$

27. $(-2) + 4 + (-5)$

28. $7 + (-8) + 6$

29. $(-4) + (-8) + 8$

30. $(-7) + 4 + (-6)$

31. $\left(-\frac{3}{2}\right) + \left(-\frac{6}{5}\right)$

32. $\left(-1\frac{1}{3}\right) + \left(-\frac{8}{5}\right)$

33. $\left(-\frac{5}{3}\right) + \left(-\frac{1}{3}\right)$

34. $\left(-\frac{5}{4}\right) + 2\frac{1}{2}$

Concept 3: Find each difference.

35. $2 - 8$

36. $(-1) - 4$

37. $6 - (-4)$

38. $(-8) - 8$

39. $3 - 4 - 5$

40. $6 - (-7) - (-4)$

41. $(-7) - 4 - 7$

42. $(-4) - 8 - (-4)$

43. $4 - 2 - (-4) - 8$

44. $7 - 7 - 2 - 8$

45. $(-3) - 7 - 4 - (-2)$

46. $(-7) - (-6) - (-1) - (-1)$

47. $\left(-\frac{2}{3}\right) - \left(-\frac{3}{2}\right)$

48. $\frac{1}{5} - \frac{3}{4}$

49. $1\frac{1}{2} - \left(-\frac{2}{3}\right)$

50. $2 - \left(-\frac{1}{2}\right)$

Concept 4: Find each product.

51. $(-4)(4)$

52. $(-7)(7)$

53. $(3)(-10)$

54. $(10)(-2)$

55. $(9)(-3)$

56. $(-9)(-9)$

57. $(9)(-1)(2)$

58. $(6)(2)(-5)$

59. $-5 \cdot 5 \cdot -2$

60. $-8 \cdot 8 \cdot -5$

61. $-1\frac{5}{6} \cdot \frac{7}{4}$

62. $-3\frac{7}{9} \cdot -\frac{3}{2}$

63. $3\frac{9}{10} \cdot -\frac{7}{9}$

64. $-\frac{7}{9} \cdot \frac{7}{4}$

Concept 5: Find each quotient.

65. $-54 \div -6$

66. $80 \div -10$

67. $-18 \div -3$

68. $12 \div -6$

69. $-30 \div 3$

70. $56 \div -8$

71. $-40 \div 10$

72. $56 \div -8$

73. $-50 \div -5$

74. $2 \div -1$

75. $-10 \div 2$

76. $-45 \div 5$

77. $-2\frac{1}{2} \div 4\frac{3}{4}$

78. $\frac{-3}{4} \div 2\frac{1}{8}$

79. $\frac{-13}{7} \div \frac{-5}{3}$

80. $-3\frac{1}{4} \div \frac{-1}{6}$

CHAPTER 1A PRACTICE TEST

Concept 1. Write each as an algebraic expression.

1. n squared
2. 10 more than a number
3. the quotient of u and 5
4. 19 decreased by 13
5. 16 less than 22
6. the product of 8 and z
7. the difference of x and 5
8. half of n

Concept 2. Find each sum.

9. $3 + 4$
10. $(-3) + 8$
11. $4 + (-5)$
12. $(-6) + (-5) + 5$
13. $(-3) + (-7) + (-3)$
14. $(-5) + 7 + 5$
15. $\frac{1}{3} + \left(-\frac{7}{4}\right)$
16. $\left(-\frac{3}{4}\right) + \left(-1\frac{1}{2}\right)$

Concept 3. Find each difference.

17. $(-7) - (-1)$
18. $(-4) - 4$
19. $8 - (-6) - 8$
20. $3 - 3 - (-3)$
21. $6 - 8 - 2 - 2$
22. $\frac{1}{3} - 1\frac{1}{3}$

Concept 4. Find each product.

23. $(-8)(-9)$
24. $5 \cdot -2 \cdot -10$
25. $-2\frac{1}{3} \cdot \frac{13}{7}$
26. $-\frac{3}{5} \cdot \frac{7}{6}$

Concept 5. Find each quotient.

27. $9 \div -3$
28. $35 \div -7$
29. $12 \div \frac{2}{7}$
30. $\frac{4}{5} \div -3\frac{1}{5}$