

# Operations with Polynomials

Chapter 1B

Practice

Assignments

**(Concepts 6-10)**

INTERMEDIATE ALGEBRA

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

**Concept 6: Solve the word problems using basic operations of addition, subtraction, multiplication, and division.**

81. Following examples 1-14 on your SSS (Concept 6), write 8 of your own Basic Operations Word Problems and solve them. You must have two problems using each operation.

Addition:

1)

2)

Subtraction:

1)

2)

Multiplication:

1)

2)

Division:

1)

2)

**Concept 7: Evaluate each expression.**

82.  $(-1 - 2) \cdot -3$

83.  $-5 \div -1 \cdot -1$

84.  $-2 \cdot -3 \cdot 5$

85.  $6 \cdot -15 \div 3$

86.  $(-1 - -3) \cdot -2 \cdot -6$

87.  $(6 - 3 - 2) \div -1$

88.  $6 \div -3(-4 - -1)$

89.  $(4 + 1) \div (-5 \cdot -1)$

90.  $(9 \cdot 2) \div (3 - 6)$

91.  $4 \div (-1 - -3)^2$

92.  $-18 \div 3 - (-1 + 6)$

93.  $2 - 5 \cdot 5 \cdot -2$

**Concept 8: Evaluate each using the values given.**

94.  $p^2 + m$ ; use  $m = 1$  and  $p = 3$

95.  $z + x - z$ ; use  $x = 3$  and  $z = 5$

96.  $z^2 + y$ ; use  $y = 3$  and  $z = 6$

97.  $2yz$ ; use  $y = 5$  and  $z = 6$

98.  $z^3 - y^2$ ; use  $y = 2$  and  $z = 4$

99.  $4 - q + p + r$ ; use  $p = 6$ ,  $q = 1$ , and  $r = 3$

100.  $(c^2 - b) \div 4$ ; use  $b = 4$  and  $c = 6$

101.  $(6 - k)^2 + j$ ; use  $j = 4$  and  $k = 1$

**Concept 9: Distribute to simplify each expression.**

102.  $-7(x - 9)$

103.  $-7(1 - 5r)$

104.  $9(6n - 7)$

105.  $-3(-7z - 8)$

106.  $-8(3b - 8)$

107.  $-7(-3 - 8x)$

108.  $-2(n - 8)$

109.  $-9(1 - 4a)$

**Concept 10 PART 1: Simplify each expression by combining like terms.**

110.  $5x - 6x$

111.  $-9k + 5k$

112.  $4n + 2n$

113.  $x - 6 + 2x - 1$

114.  $9 - 3m + 7m$

115.  $3p + 2p$

116.  $1 - 9x + 4 + 7x$

117.  $9n - 7 - 5$

**Concept 10 PART 2: Distribute and then combine like terms.**

118.  $7 - 9(-1 + 4x)$

119.  $8(9 + 4p) - 6$

120.  $-4(2n + 4) - n$

121.  $-10m + 3(1 - 2n)$

122.  $-3(x + 1) - 8(x - 8)$

123.  $7(1 - 4a) + 7(4 + 5a)$

124.  $2(-4x - 2) - 8(1 - 3x)$

125.  $10(5 + 9k) - 10(k + 5)$

## CHAPTER 1B PRACTICE TEST

**Concept 6. Solve the word problems using basic operations of addition, subtraction, multiplication, and division.**

31. Following examples 1-14 on your SSS (Concept 6), write 4 of your own Basic Operation Word Problems and solve them. You must write one for each operation.

**Concept 7. Evaluate each expression.**

32.  $6 + 1 - -6$

33.  $2 \div (3 - -2 \cdot -2)$

34.  $(-6 + 2) \cdot 2 \cdot -1$

35.  $1 + (9 - 3) \div 2$

**Concept 8. Evaluate each using the values given.**

36.  $y - (z - z)$ ; use  $y = 6$  and  $z = 1$

37.  $z - x \div 3$ ; use  $x = 3$  and  $z = 4$

38.  $k - j \div 2$ ; use  $j = 2$  and  $k = 4$

39.  $3(x^2 + y)$ ; use  $x = 2$  and  $y = 1$

**Concept 9. Distribute to simplify each expression.**

40.  $-7(8 - 9x)$

41.  $8(6v + 1)$

**Concept 10 PART 1. Simplify each expression by combining like terms.**

42.  $1 - a + 8 + 2a$

43.  $2 - 4a + 2 - 4a$

**Concept 10 PART 2. Distribute and then combine like terms.**

44.  $-5(7x - 8) - 6$

45.  $3(8 - 3n) - 3(7 - n)$