

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