

Answer Key for Chapter 0 A Precalculus Review

Section 0.1: The Real Line and Order

Objective 1: Represent, classify, and order real numbers.

[1] (D)

[2] (E)

[3] (E)

[4] (E)

Objective 2: Use inequalities to represent sets of real numbers.

[5] (D)

[6] (A)

[7] (E)

[8] (A)

Objective 3: Solve inequalities.

[9] (C)

[10] (C)

[11] (E)

[12] (B)

Objective 4: Use inequalities to model and solve real-life problems.

[13] (E)

[14] (D) _____

[15] (B) _____

[16] (E) _____

Section 0.2: Absolute Value and Distance on the Real Line

Objective 1: Find the absolute values of real numbers and understand the properties of absolute value.

[17] (C) _____

[18] (A) _____

[19] (A) _____

[20] (C) _____

Objective 2: Find the distance between two numbers on the real line.

[21] (B) _____

[22] (A) _____

[23] (D) _____

[24] (E) _____

Objective 3: Define intervals on the real line.

[25] (B) _____

[26] (A) _____

[27] (A) _____

[28] (E) _____

Objective 4: Find the midpoint of an interval and use intervals to model and solve real-life problems.

[29] (C) _____

[30] (D) _____

[31] (E) _____

[32] (B) _____

Section 0.3: Exponents and Radicals

Objective 1: Evaluate expressions involving exponents and radicals.

[33] (E) _____

[34] (D) _____

[35] (B) _____

[36] (B) _____

Objective 2: Simplify expressions with exponents.

[37] (C) _____

[38] (A) _____

[39] (C) _____

[40] (D) _____

Objective 3: Find the domains of algebraic expressions.

[41] (B) _____

[42] (C) _____

[43] (D) _____

[44] (D) _____

Section 0.4: Factoring Polynomials

Objective 1: Use special products and factorization techniques to factor polynomials.

[45] (A) _____

[46] (C) _____

[47] (E) _____

[48] (C) _____

[49] (E) _____

Objective 2: Find the domains of radical expressions.

[50] (B) _____

[51] (C) _____

[52] (B) _____

[53] (B) _____

Objective 3: Use synthetic division to factor polynomials of degree three or higher.

[54] (D) _____

[55] (B) _____

[56] (D) _____

[57] (D) _____

Objective 4: Use the Rational Zero Theorem to find the real zeros of polynomials.

[58] (A) _____

[59] (D) _____

[60] (B) _____

[61] (B) _____

Section 0.5: Fractions and Rationalization

Objective 1: Add and subtract rational expressions.

[62] (D) _____

[63] (E) _____

[64] (E) _____

[65] (B) _____

Objective 2: Simplify rational expressions involving radicals.

[66] (A) _____

[67] (B) _____

[68] (A) _____

[69] (C) _____

Objective 3: Rationalize numerators and denominators of rational expressions.

[70] (E) _____

[71] (A) _____

[72] (A) _____

[73] (E) _____