

**IADT: Intermediate Algebra Diagnostic Test**  
**Placement Test Study Guide**  
Math 155, 9, 10, 15, 16, 25, 27 or 58

**TYPICAL QUESTIONS FROM COMPETENCY AREAS:**

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**Elementary Numeric and Algebraic Operations**

•  $\frac{c}{d} + 2 =$

- (A)  $\frac{c+2d}{d}$       (B)  $\frac{c+2}{d+2}$       (C)  $\frac{c+2}{d}$       (D)  $c+2d$       (E) 2

**Rational Expressions**

•  $\frac{c-d}{\frac{1}{d}-\frac{1}{c}} =$

- (A)  $\frac{c-d}{dc}$       (B)  $\frac{dc}{c-d}$       (C)  $dc$       (D)  $-dc$       (E)  $\frac{1}{dc}$

**Exponents and Radicals**

•  $\sqrt{3} + \sqrt{27} =$

- (A) 6      (B)  $3\sqrt{3}$       (C)  $4\sqrt{3}$       (D)  $10\sqrt{3}$       (E)  $\sqrt{30}$

**Linear Equations; Inequalities; Absolute Value**

• If  $3x + 2y = 8$  and  $y = x - 1$ , then  $x =$

- (A) -6      (B)  $\frac{6}{5}$       (C)  $\frac{7}{5}$       (D)  $\frac{9}{5}$       (E) 2

**Polynomials; Quadratic equations**

• One of the roots of  $(x-2)(3x+4) = 0$  is

- (A) -2      (B)  $-\frac{4}{3}$       (C)  $-\frac{3}{4}$       (D)  $\frac{3}{4}$       (E)  $\frac{4}{3}$

**The Coordinate Plane and Graphing**

• Which of the following is an equation of a line with slope 3 and y-intercept -4?

- (A)  $y = \frac{1}{3}x - 4$       (B)  $y = 3x - 4$       (C)  $y = 3x + 4$       (D)  $y = 4x - 3$       (E)  $y = 4x + 3$

**Functions and Logarithms**

- If  $\log_{10} x + \log_{10} y = 3$ , then  $xy =$

(A) 0.001                      (B) 1.0                      (C) 10                      (D) 100                      (E) 1000

**Word Problems**

- A student who correctly answered 72 questions on a test received a score of 75%. How many questions were on the test?

(A) 54                      (B) 72                      (C) 75                      (D) 96                      (E) 104

**ANSWERS TO SAMPLE QUESTIONS  
INTERMEDIATE ALGEBRA DIAGNOSTIC TEST**

**Elementary operations**                      \*(A)

**Rational Expressions**                      \*(C)

**Exponents/Radicals**                      \*(C)

**Linear Equalities/Inequalities**                      \*(E)

**Polynomials/Quadratics**                      \*(B)

**Graphing**                      \*(B)

**Functions/Logarithms**                      \*(E)

**Word Problems**                      \*(D)