

EADT: Elementary Algebra Diagnostic Test
Placement Test Study Guide
Math 150A, 151, or 155

TYPICAL QUESTIONS FROM COMPETENCY AREAS:

Arithmetic

• $(0.12)^2 =$

- (A) 0.00144 (B) 0.0144 (C) 0.144 (D) 0.24 (E) 1.44

Polynomials

• One of the factors of $x^2 - x - 6$ is:

- (A) $x + 3$ (B) $x + 2$ (C) $x - 1$ (D) $x - 2$ (E) $x - 6$

Linear Equations and Inequalities

• If $6x - 3 = 8x - 9$, then $x =$

- (A) -6 (B) -3 (C) 3 (D) $-\frac{6}{7}$ (E) $\frac{6}{7}$

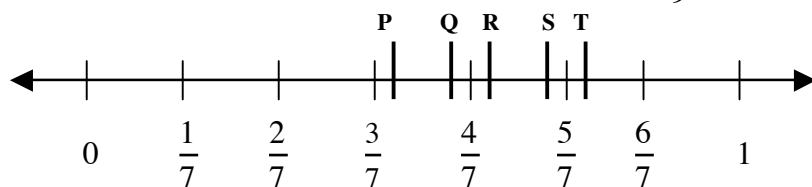
Quadratic Equations

• What are the possible values of x such that $3x^2 - 2x = 0$?

- (A) $-\frac{2}{3}$ only (B) 0 only (C) $\frac{2}{3}$ only (D) 0 and $\frac{2}{3}$ (E) $-\frac{2}{3}$ and $\frac{2}{3}$

Graphing

• On the number line below, which letter best locates $\frac{5}{9}$?



- (A) P (B) Q (C) R (D) S (E) T

Rational Expressions

• $\frac{2}{w+1} - \frac{1}{w-1} =$

(A) $\frac{1}{w+2}$

(B) $\frac{1}{w^2-1}$

(C) $\frac{w-3}{w^2-1}$

(D) $\frac{w+3}{w^2-1}$

(E) $\frac{3w-1}{w^2-1}$

Exponents and Square Root

• If $x > 0$, then $\sqrt{64x^{16}} =$

(A) $8x^4$

(B) $8x^8$

(C) $16x^4$

(D) $32x^4$

(E) $32x^8$

Geometry and Measurement

• In the right triangle shown to the right, what is the length of AC ?

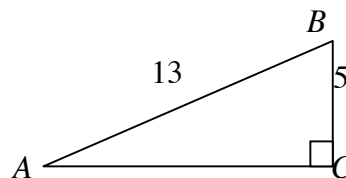
(A) 8

(B) 12

(C) 18

(D) $\sqrt{18}$

(E) $\sqrt{194}$



Word Problems

• If x is to 5 as y is to 8, what is the value of x when $y = 2$?

(A) $\frac{5}{16}$

(B) $\frac{4}{5}$

(C) $\frac{5}{4}$

(D) $\frac{16}{5}$

(E) 5

ANSWER TO SAMPLE QUESTIONS ELEMENTARY ALGEBRA DIAGNOSTIC TEST

Arithmetic

*(B)

Polynomials

*(B)

Linear Eq/Inequalities

*(C)

Quadratic Equations

*(D)

Graphing

*(B)

Rational Expressions

*(C)

Exponents/Square Roots

*(B)

Geometry/Measurement

*(B)

Word Problems

*(C)