

College of the Redwoods
Mathematics Department

Intermediate Algebra
Entry Level Exam

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1. Introduction

The mathematics department at the College of the Redwoods has developed a series of practice examinations. The purpose of these practice examinations is to prepare the reader to take the actual entry level examinations offered by Student Services testing department.

The goal is to place each student in a class commensurate with their ability and preparation. We want students to succeed and firmly believe that proper initial placement greatly aids the path to student success.

1.1. Instructions

In the following pages you will be presented with a series of questions, each with multiple choice answers. After working the problem on scratch paper, enter your response by using your mouse to click the “best” possible available answer. Good luck!

1.2. The Examination

Begin Quiz Instructions for taking the quiz.

1. $(-3ab^2)^3$ equals

- (a) $9a^2b^4$ (b) $27a^3b^5$ (c) $-27a^3b^5$ (d) $-27a^3b^6$
(e) None of these

2. $(a + 2b)^2$ equals

- (a) $a^2 + 4b^2$ (b) $a^2 + 2ab + 4b^2$ (c) $a^2 + 4ab + 4b^2$
(d) $a^2 + 2ab + 2b^2$ (e) None of these

3. One of the factors of $x^2 - 5x - 6$ is

- (a) $x + 6$ (b) $x + 1$ (c) $x - 6$
(d) $x - 2$ (e) None of these

4. Simplify $\frac{1}{x} + \frac{x}{x-1}$.

(a) $\frac{1+x}{2x-1}$

(b) $\frac{1+x}{x}$

(c) $\frac{x^2+x-1}{x(x-1)}$

(d) $\frac{1}{x-1}$

(e) None of these

5. Reduce to lowest terms: $\frac{x^2-4}{x-2}$

(a) $x-2$

(b) $\frac{1}{x-2}$

(c) $2x-1$

(d) $x+2$

(e) None of these

6. -3^{-2} equals

(a) 6

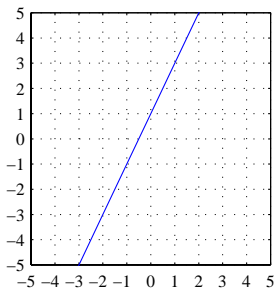
(b) -6

(c) $\frac{1}{9}$

(d) $\frac{1}{6}$

(e) None of these

7. What is the slope of the line pictured below?



(a) -2

(b) $-\frac{1}{2}$

(c) 2

(d) $\frac{1}{2}$

(e) None of these

End Quiz