**McCann**
Associates

**GOODWIN COLLEGE**

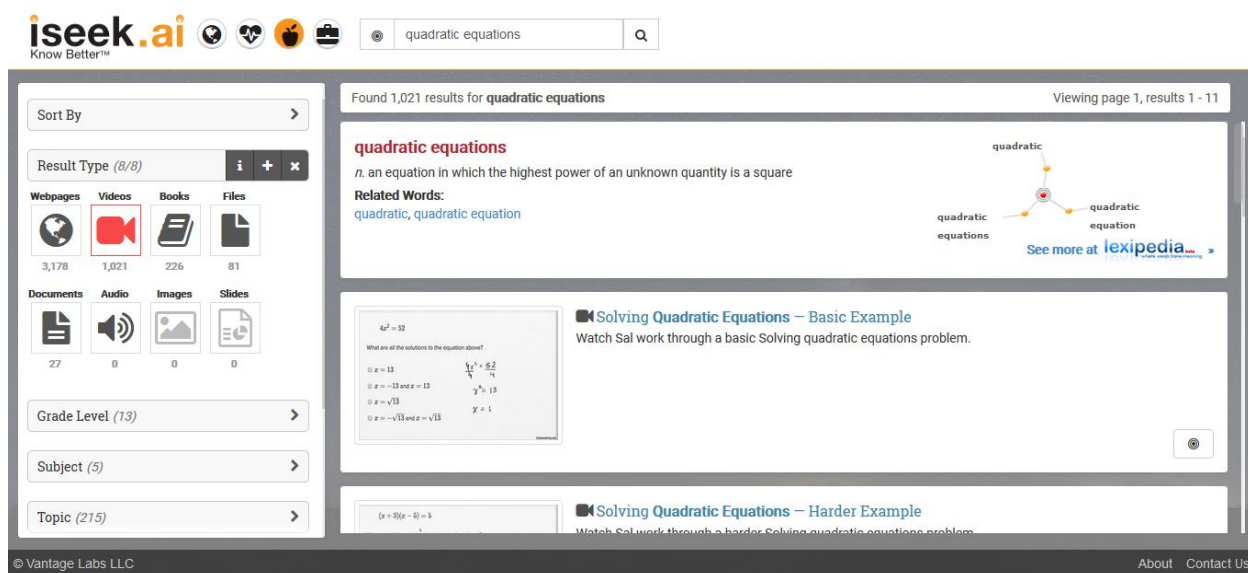# CollegeSuccess®
# Placement Test Study Guide

# CollegeSuccess ®

## Table of Contents

## Test Taking Tips

### *Prepare*

Take practice assessments and study areas of weakness.  An effective study resource provided by McCann can be found here:  http://iseek.com/#/web. This educational remedial resource is provided at no charge. McCann's iseek.ai uses our natural language understanding patents to conduct searches, thereby greatly improving the quality of resources provided (e.g., Khan Academy), and minimizing the number of search results returned.  "Learn Faster, Learn Better…"

If you need a calculator while you practice, use a standard four-function calculator (sample below), which will be available during the assessment.
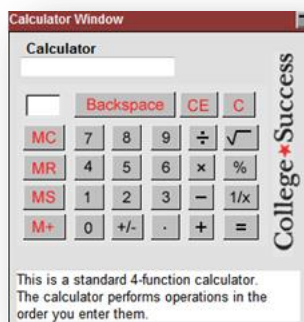
### *Read the directions carefully*

When you take the assessments, make sure to take your time and carefully follow the instructions for each question.

**Use reasoning when answering**
- ✓ Identify the key phrase in the question.
- ✓ Try to find the correct answer before you read all the choices.
- ✓ Eliminate the choices that you know are not correct.
- ✓ Read all the choices and pick the best answer.

**Review**

Be sure to review each answer carefully before submitting. You will not be able to go back to any questions.

## Subject Area Tests

There are four multiple choice tests. There may also be a written essay portion. The content that is covered in the multiple choice tests are listed below by subject:

### *Arithmetic (17 questions):*
- ✓ Numbers—Compare numbers, use algorithms, solve problems, and estimate.
- ✓ Expressions—Simplify and evaluate.
- ✓ Equations—Solve and graph.
- ✓ Coordinates—Translate between an equation and a line, including slope, and solve geometric problems.
- ✓ Statistics—Draw statistical conclusions based on data, include mean, median, and mode.

### *Algebra (*12 questions*):*
- ✓ Equations—Understand a problem and formulate an equation to solve it, solve equations in one variable using manipulations guided by the rules of arithmetic and the properties of equality, rearrange formulas to isolate a quantity of interest.
- ✓ Functions—Analyze functions using symbolic manipulation, use the families of linear and exponential functions to solve problems.
- ✓ Expressions—See structure in expressions, manipulate simple expressions, define variables and write an expression to represent a quantity in a problem, interpret an expression that represents a quantity in terms of the context.

## Reading (30 questions):

- ✓ Main Idea—Identify the stated or implied main idea of a passage.
- ✓ Ideas and Details—Recognize significant details that answer the questions who, what, when, where, why, and how.
- ✓ Evidence, Claims, and Support—Recognize and evaluate evidence offered in support of a claim.
- ✓ Relationships—Understand relationships within and between sentences.
- ✓ Text Structure—Identify organizational patterns in a passage.
- ✓ Inferences—Make inferences, generalizations, and predictions and draw conclusions.
- ✓ Purpose—Determine the author's purpose and point of view.
- ✓ Comparison—Make comparisons and distinctions between two passages on the same topic.
- ✓ Meaning—Determine the meaning and impact of context-dependent words, phrases, and statements.

## Sentence Skills (20 questions):

- ✓ Recognizing Complete Sentences—Demonstrate fluency in sentence completion, sentence revision, and sentence structure.
- ✓ Coordination/Subordination—Recognize and use conditional sentences and combine sentences effectively.
- ✓ Clear Sentence Logic—Demonstrate proper use of modifiers, possessives, prepositions, subject/verb agreement, verb/adverb use, verb/word tense, word choice, and word order.

# Sample Questions

## *Arithmetic Sample Questions:*

1. Choose the fraction that correctly fits the number sentence.

$$\frac{1}{2} < \text{\_\_\_} < \frac{4}{5}$$

   A. $\frac{1}{3}$

   B. $\frac{2}{4}$

   C. $\frac{2}{3}$

   D. $\frac{5}{6}$

2. "A number divided by 4" can be written as —

   A. $4n$
   B. $4 - n$
   C. $4 \div n$
   D. $n \div 4$

3. In the equation $7x = 35$, what is the value of $x$?

   A. 3
   B. 5
   C. 7
   D. 9

4. Quadrilateral $ABCD$ has vertices $A$ (0, 0), $B$ (4, 0), and $C$ (4, 3). If $ABCD$ is a rectangle, what must be the coordinates of vertex $D$?

   A.  (0, 3)
   B.  (0, 4)
   C.  (3, 0)
   D.  (3, 4)

5. What is the mean of the following set of numbers?

<div align="center">

2, 5, 11, 14, 18

</div>

   A.  9
   B.  10
   C.  11
   D.  16

## *Algebra Sample Questions:*

1. In one season, the New England Patriots won 14 football games and lost 2 games. Which number sentence should be used to find the percentage ($p$) of all games played that season that were wins?

   A. $p = 14 \cdot 2$
   B. $p = 14 \div 2$
   C. $p = 14 - 2$
   D. $p = 14 \div (14 + 2)$

2. Solve for $x$.

$$5 = \sqrt{x - 21}$$

   A. 26
   B. 34
   C. 46
   D. 53

3. At the local document copying store, a copy machine can produce an average of 74 pages per minute. If the store has $x$ copy machines, which function shows how many copies can be produced in a 24-hour period at the store?

   A. $f(x) = (74 \cdot 60 \cdot 24)x$
   B. $f(x) = (74 \cdot 60 \cdot 24) + x$
   C. $f(x) = (74 \cdot 60 \cdot 24) - x$
   D. $f(x) = (74 \cdot 60 \cdot 24) \div x$

4. The work rates for a local plumber are shown in the table.

**Plumber Rates**

| Hours | Charge (in dollars) |
|---|---|
| **1** | 66 |
| **2** | 82 |
| **3** | 98 |
| **4** | 114 |

Which expression can be used to determine the charge for $h$ hours of work?

A. $66h$

B. $50h + 16$

C. $16h + 50$

D. $\frac{1}{6}h + 50$

5. Which of the following word problems can be solved by using the expression $25x$?

A. Jim divided 25 movie tickets evenly among his friends. If $x$ is the number of friends, how many movie tickets did each one get?

B. In one week a movie theater sold 25 packets of tickets. If $x$ is the number of tickets in each packet, how many tickets were sold altogether?

C. A packet of 25 tickets contains equal amounts of each movie. If $x$ is the number of movies, how many tickets for each movie does the packet contain?

D. A small gift packet of movie tickets has 25 fewer tickets than a large packet. If $x$ is the number of tickets in a large packet, how many tickets are in a small packet?

*Reading Sample Questions:*

<u>**Read the selection and answer the question.**</u>

<center>The Old Juniper Tree
by Robert Fulghum</center>

There is a tree. At the downhill edge of a long, narrow field in the western foothills of the La Sal Mountains—southeastern Utah. A particular tree. A juniper. Large for its species—maybe twenty feet tall and two feet in diameter. For perhaps three hundred years this tree has stood its ground. Flourishing in good seasons, and holding on in bad times. "Beautiful" is not a word that comes to mind when one first sees it. No naturalist would photograph it as exemplary of its kind. Twisted by wind, split and charred by lightning, scarred by brushfires, chewed on by insects, and pecked by birds. Human beings have stripped long strings of bark from its trunk, stapled barbed wire to it in using it as a corner post for a fence line, and nailed signs on it on three sides: NO HUNTING, NO TRESPASSING; PLEASE CLOSE THE GATE. In commandeering this tree as a corner stake for claims of rights and property, miners and ranchers have hacked signs and symbols in its bark, and left Day-Glo™ orange survey tape tied to its branches. Now it serves as one side of a gate between an alfalfa field and open range. No matter what, in drought, flood, heat, and cold it has continued. There is rot and death in it near the ground. But at the greening tips of its upper branches and in its berrylike seed cones, there is yet the outreach of life.

I respect this old juniper tree. For its age, yes. And for its steadfastness in taking whatever is thrown at it. That it has been useful in a practical way beyond itself counts for much, as well. Most of all, I admire its capacity for self-healing beyond all accidents and assaults. There is a will in it—toward continuing to be, come what may.

1. Read the following sentences from "The Old Juniper Tree."

   > I respect this old juniper tree. For its age, yes. And for its <u>steadfastness</u> in taking whatever is thrown at it.

   The <u>best</u> definition for the word <u>steadfastness</u> is —

   A. skill.
   B. constancy.
   C. eagerness.
   D. consciousness.

**Read the selection and answer the question.**

Painting a Window

(1) Decorating a window with a painted scene from nature might be of interest to you. (2) If you like to see nature outside your window, but you don't have a scene of real nature, you may want to try this idea. (3) Before you begin, be sure to ask your parents if it is okay.

(4) The first step you should take is to purchase a paintbrush and powder paints in the colors that you enjoy. (5) When you have your supplies, mix the paints, place newspaper on your windowsill, and make sure your window is clean. (6) On the inside of your window, it is important to do your decorating because rain may wash away outdoor painting.

(7) Use your imagination and begin painting a scene from nature on your window. (8) A sun, grass, trees, and flowers are good things to paint. (9) If you have a big window you may want to paint other things. (10) Painting people, balloons, and playground equipment on a window might be a fun idea. (11) When you are finished, stand back and look at your decorated window. (12) If you like the results, share the idea of window painting with someone else.

2. The student explains that a big window may require some extra painting. The student supports this idea by —

A. suggesting painting techniques.
B. describing types of supplies to buy.
C. offering suggestions of pictures to paint.
D. explaining the steps of window painting.

**<u>Read the selection and answer the question.</u>**

The Magic of Harry

Harry Houdini was a man who astonished and enthralled many people during his life. Whether he was escaping from a padlocked box or making things disappear and reappear, he definitely was entertaining. People thought that he must truly have some supernatural powers, but in fact, what Harry really had was drive.

Harry was born in Budapest, Hungary, in 1874. His real name was Ehrich Weiss and he was the third of five children. His family moved to Wisconsin not long after he was born and by the time he was nine, he was tying ropes all over his backyard and learning amazing trapeze tricks to show his friends and neighbors. He visited the local locksmith, and when he had reached his teens he could pick almost any lock that was made. He also learned how to do card tricks. He and his brother, Theo, would often entertain at local parties and clubs for extra money.

When Ehrich was 16, he came across a book that would literally change his life: the biography of France's greatest magician, Jean Eugene Robert-Houdin. It showed Ehrich that his hobby of magic and tricks could also be a career. Immediately, he changed his name to Harry Houdini. He and Theo headed out to make a living as magicians.

In 1893, they were at the Chicago World's Fair, and after that they traveled around giving magic shows for anyone willing to listen and pay. Theo grew restless, however, as the jobs became scarce, so he left. His timing was perfect since Harry had just fallen in love with a lovely woman named Bess who was just the right size for slipping in and out of the trunk they used in their magic tricks. They married immediately and then off they went, traveling with circuses and other road shows. Harry learned more and more tricks and spent much of his time reading and studying all kinds of locks, especially handcuffs. However, no matter what tricks they did or how hard they tried, Bess and Harry were not doing well. They tried to sell their shows for seven years and finally, in desperation, they went to Europe.

It was the right move. Harry's persistence and constant practice were about to pay off. To get people's attention, he walked into police stations and offered to be handcuffed by all the policemen. They were shocked when he was loose only seconds later. Soon, everyone in Europe was talking about Houdini's astounding feats. He was in high demand and found himself doing more and more dangerous acts. He escaped from a straitjacket hanging upside down over the street; he escaped from locked boxes of all kinds; and, of course, he got out of any kind of handcuffs put on him.

After several years in Europe, Bess and Harry returned to the United States in triumph. Harry was doing such amazing tricks that people felt he must have special powers. However, few realized how much time he spent practicing and studying. He

would do special exercises to keep his body strong, and he would do tricks with his fingers to keep them nimble and flexible. He would spend large amounts of time tying and untying knots—with his toes! For his underwater tricks, he would get in the bathtub and practice holding his breath for longer and longer times. Since many of his tricks involved being plunged into icy water, he would pour buckets of ice in the tub to get accustomed to working in the cold.

The reason that Harry Houdini was such a success was that he practiced and prepared for whatever might happen. When a college student punched him in the abdomen in 1926, however, he wasn't prepared. The punch did internal damage that not even this magician could get out of. Harry died in 1926 at 52 years of age—a master of his trade and a true legend.

3.  Houdini decided to become a magician after he —

   A.  learned to pick a lock.
   B.  learned to do card tricks.
   C.  started entertaining at local parties.
   D.  read a book about a famous magician.

### Read the selection and answer the question.

"The Railway Train"
by Emily Dickinson

I like to see it lap the miles,
And lick the valleys up,
And stop to feed itself at tanks;
And then, prodigious, step

Around a pile of mountains, 5
And, supercilious, peer
In shanties by the sides of roads;
And then a quarry pare

To fit its sides, and crawl between,
Complaining all the while 10
In horrid, hooting stanza;
Then chase itself down hill

And neigh like Boanerges;
Then, punctual as a star,
Stop—docile and omnipotent— 15
At its own stable door.

Source: Dickinson, Emily. "The Railway Train." The Compete Poems of Emily
Dickinson. Boston: Little, Brown, 1960. (1893)

4. Which of the following <u>best</u> describes the tone of the poem?

A. Playful
B. Ardent
C. Sinister
D. Indifferent

5. Read the sentence and choose the word that best fits in the blank.

The long walk from the parking lot may have caused some to complain, but it did not _____ Carla at all; in fact, she enjoyed it.

A. blister
B. bother
C. bolster
D. blunder

## *Sentence Skills Sample Questions:*

1. Choose the best word to complete the sentence.

   The World Cup is the most popular sporting event in the world, _____ not the most popular sporting event in the United States.

   A. so
   B. but
   C. because
   D. however

2. Choose the best word or words to replace the underlined words in the sentence.

   Yesterday, I <u>will go</u> to the museum to see the new exhibit.

   A. had went
   B. will be going
   C. went
   D. have gone

3. Choose the answer that shows apostrophes used correctly.

   A. The sign in the store window read, "Todays Special Apple's Half Price."
   B. Is that yours' or Stevens?
   C. Don't come in here with those muddy boots!
   D. Lets' go for a ride in Dannys' car.

4. Read the following sentences and answer the question.

The students were tired. The students were up all night studying their textbooks.

Which of the following choices best combines the two sentences?

A. The students, being tired, were up all night studying their textbooks.
B. The students were up all night studying their textbooks, yet they are tired.
C. The students were tired, but they were up all night studying their textbooks.
D. The students were tired because they were up all night studying their textbooks.

# Answer Keys:

## *Arithmetic:*

| Sequence | Description | Key |
|---|---|---|
| 1 | Compare numbers and make sense of their magnitude. | C |
| 2 | See structure in expressions. | D |
| 3 | Solve equations in one variable using manipulations guided by the rules of arithmetic and the properties of equality. | B |
| 4 | Use coordinates to solve geometric problems. | A |
| 5 | Draw statistical conclusions involving population means or proportions using sample data. | B |

## *Algebra:*

| Sequence | Description | Key |
|---|---|---|
| 1 | Understand a problem and formulate an equation to solve it. | D |
| 2 | Solve equations in one variable using manipulations guided by the rules of arithmetic and the properties of equality. | C |
| 3 | Analyze functions using symbolic manipulation. | A |
| 4 | Define variables and write an expression to represent a quantity in a problem. | C |
| 5 | Interpret an expression that represents a quantity in terms of the context. | B |

## *Reading:*

| Sequence | Description | Key |
|---|---|---|
| 1 | Determine what is meant by words and phrases in context, including connotative meanings and figurative language. | B |
| 2 | Evaluate the reasoning and rhetoric that support an argument or explanation, including assessing whether the evidence provided is relevant and sufficient. | C |
| 3 | Determine both what the text says explicitly and what can be inferred logically from the text. | D |
| 4 | Analyze how specific word choices shape the meaning and tone of the text. | A |
| 5 | Choose words and phrases to express ideas precisely and concisely. | B |

## *Sentence Skills:*

| Sequence | Description | Key |
|---|---|---|
| 1 | Recognize and maintain proper sentence structure. | B |
| 2 | Maintain proper verb tense. | C |
| 3 | Use possessives correctly. | C |
| 4 | Effectively combine sentences using coordination or subordination. | D |