

# EIAT STUDY GUIDE

## What is the EIAT?

The **Elevator Industry Aptitude Test (EIAT)** is used to assess the skills and knowledge required to be a successful apprentice in the International Union of Elevator Constructors. This is not an assessment of how much you already know about being an elevator constructor. Instead, it assesses your current level of understanding of the critical thinking skills needed to work and learn in the trade.

## What does the EIAT cover?

The assessment covers **reading comprehension, mechanical comprehension, and basic math skills**. Having a basic aptitude in these areas ensures that apprentices will be able to succeed in the four-year apprenticeship required to become an IUEC mechanic.

## What will the test look like?

The EIAT is administered on paper as part of the recruitment process. It consists of **100 multiple choice questions**. The questions will ask you to use critical thinking and reasoning as well as make calculations and solve equations. The breakdown of the test is:

- **Reading Comprehension: 35 Questions**
- **Mechanical Aptitude: 35 Questions**
- **Mathematics: 30 Questions**

## How should I study for the EIAT?

**Keep in mind** that the EIAT is designed to measure your current aptitude for skills you will need in the IUEC. There is no requirement for specific prior knowledge or training to become an apprentice. Apprentices learn while they earn on the job, and complete related training in the NEIEP classroom.

That said, here are some areas you can focus on to prepare for the assessment:

## Mechanical Aptitude

- **Basic Mechanics:**
  - Review fundamental principles of machines such as levers, pulleys, and gears.
- **Hydraulics:**
  - Understand basic hydraulic concepts including area and pressure.
- **Fulcrums and Levers:**
  - Understand basic concepts around fulcrums and levers and how objects of different weights can be balanced.

## Math Skills

- **Arithmetic:**
  - Brush up on arithmetic skills, including addition, subtraction, multiplication, division, fractions, decimals, and percentages.
- **Algebra:**
  - Review algebraic concepts, such as solving equations, manipulating formulas, and understanding basic algebraic expressions.

## Reading Comprehension

- **Identify the Main Question:**
  - Practice identifying the main ideas and key concepts in a question. Pay attention to what the question wants you to answer.
  - Enhance your analytical thinking skills by identifying relationships between ideas, drawing conclusions, and evaluating information.

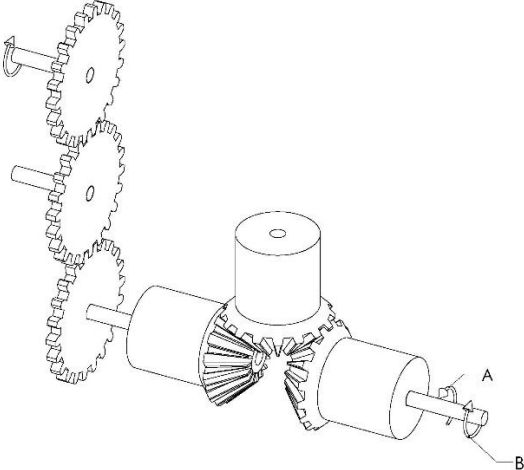
## Example Questions

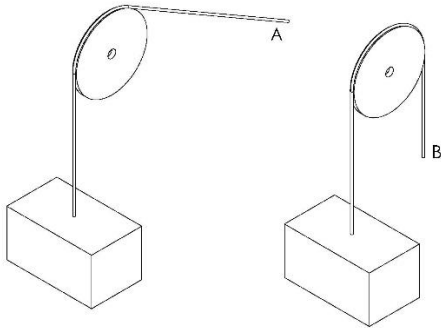
Here are examples of the kind of question the EIAT will use for each competency.

Reading Comprehension	
<p>Successful career readiness involves developing a diverse set of ____ <b>1</b> ____ to thrive in dynamic workplaces. Employers seek individuals who demonstrate strong ____ <b>2</b> ____ and can adapt to evolving challenges. Effective ____ <b>3</b> ____ skills are essential for building professional relationships and fostering teamwork. Moreover, having a growth-oriented ____ <b>4</b> ____ is crucial for continuous improvement and career advancement.</p>	<p>1. A. hobbies B. competences C. opinions D. vacations</p> <p>2. A. ambiguity B. adaptability C. stubbornness D. isolation</p> <p>3. A. communication B. procrastination C. perfectionism D. skepticism</p> <p>4. A. stagnation B. mindset C. disorganization D. compliance</p>
<p><b>Correct Answers</b> [1]: b [2]: b [3]: a [4]: b</p>	

Mathematics	
<p><b>This question evaluates the applicant's ability to divide using decimals.</b></p>	<p>1. <math>6.2 \overline{)125.4}</math></p> <p>a) 20.2 b) 19.5 c) 21 d) 18.9 e) No answer</p>

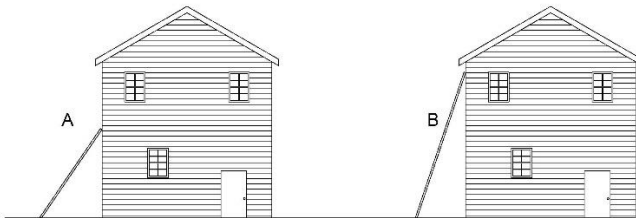
<p><b>This question evaluates the applicant's ability to multiply using mixed numbers.</b></p>	<p>2. <math>3\frac{1}{2} \times \frac{2}{3}</math></p> <p>a) <math>1\frac{5}{6}</math>  b) <math>2\frac{1}{6}</math>  c) <math>2\frac{1}{3}</math>  d) <math>1\frac{2}{3}</math>  e) No answer</p>
<p><b>This question evaluates the applicant's ability to use order of operations and solve multi step problems.</b></p>	<p>3. <math>\frac{(15.6 - (3.2 \times 2))}{2.5} \div 0.5</math></p> <p>a) 4.8  b) 7.36  c) -2  d) 6.4  e) No answer</p>
<p><b>Correct Answers</b></p> <p>[1]: a  [2]: c  [3]: b</p>	

<p><b>Mechanical Aptitude</b></p>	
<p>GEAR # 1</p> 	<p>1. If gear #1 turns in the direction shown, in which direction the rod turn?</p> <p>A. A  B. B  C. Either A or B</p>



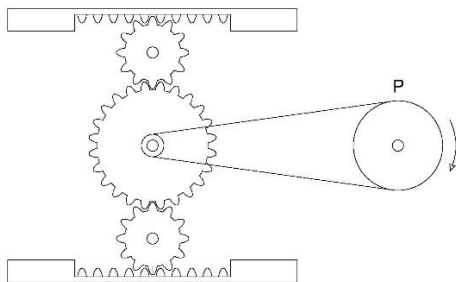
2. Which rope will move the box faster?

- A. A
- B. B
- C. No difference



3. Which ladder is more likely to stay up?

- A. A
- B. B
- C. No difference



4. If the pulley (P) turns in the direction shown, in which direction will the top rod travel?

- A. Left
- B. Right
- C. Both left and right

### **Correct Answers**

**[1]:** a

**[2]:** c

**[3]:** b

**[4]:** a