

Pipefitting Year One Practice Exam (Sample)

Study Guide



Everything you need from our exam experts!

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	16

SAMPLE

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 - 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

SAMPLE

- 1. Which type of fitting is commonly used for a dielectric union in hot water heaters?**
 - A. Compression fitting**
 - B. Cast iron fitting**
 - C. Slip fitting**
 - D. Lip union**

- 2. If a beam is made up of 33 pieces of steel, each measuring 1.66 feet, what is the total length of the beam in feet?**
 - A. 50.8**
 - B. 52.8**
 - C. 54.8**
 - D. 56.8**

- 3. What type of simple machine is a pulley considered to be?**
 - A. Lever**
 - B. Inclined Plane**
 - C. Wheel and Axle**
 - D. Fixed Pulley**

- 4. What must be checked when replacing any grinding, finishing or brushing accessory?**
 - A. The RPM rating**
 - B. The weight limit**
 - C. The material type**
 - D. The size of the accessory**

- 5. How should an empty cylinder be marked?**
 - A. Full**
 - B. MT**
 - C. Empty**
 - D. Hazardous**

- 6. Which of the following describes galvanized bending quality pipe?**
- A. A glass lined pipe**
 - B. Treated in a special way to prevent flaking**
 - C. Pipe that is required to be cleaned free of rust**
 - D. Thoroughly cleaned with a protective coating**
- 7. When measuring pipe lengths, what is a common method for ensuring proper fit?**
- A. Cutting with a hacksaw**
 - B. Using a pipe cutter**
 - C. Marking with chalk**
 - D. None of the above**
- 8. What is the decimal value of 0.45 expressed in words?**
- A. Forty-five hundredths**
 - B. Four hundred fifty thousandths**
 - C. Four point five**
 - D. Forty-five thousandths**
- 9. True or False: A butterfly valve is a type of check valve.**
- A. True**
 - B. False**
 - C. Depends on the application**
 - D. Only in certain sizes**
- 10. Cutting oils should not exceed which of the following temperatures?**
- A. 225°F**
 - B. 110°F**
 - C. 190°F**
 - D. 98°F**

Answers

SAMPLE

1. D
2. C
3. D
4. A
5. B
6. B
7. B
8. A
9. B
10. B

SAMPLE

Explanations

SAMPLE

1. Which type of fitting is commonly used for a dielectric union in hot water heaters?

- A. Compression fitting**
- B. Cast iron fitting**
- C. Slip fitting**
- D. Lip union**

A dielectric union is specifically designed to prevent galvanic corrosion when dissimilar metals are connected, such as copper and steel piping. In the context of hot water heaters, the dielectric union serves as a crucial component, allowing the connection between the metal tank of the heater, which is often steel, and the piping that may be copper. The correct choice highlights the fact that a lip union effectively provides the necessary separation between the dissimilar metals, utilizing insulating materials that inhibit the corrosive reaction. This allows the hot water heater to function effectively while also prolonging the life of the piping system. While other fittings, such as compression fittings, cast iron fittings, and slip fittings, serve important roles in various plumbing applications, they do not possess the specific characteristics that dielectric unions have. Thus, they are not suitable for preventing corrosion between dissimilar metals in the context of hot water heaters.

2. If a beam is made up of 33 pieces of steel, each measuring 1.66 feet, what is the total length of the beam in feet?

- A. 50.8**
- B. 52.8**
- C. 54.8**
- D. 56.8**

To find the total length of the beam made up of 33 pieces of steel, each measuring 1.66 feet, you need to perform a simple multiplication of the number of pieces by the length of each piece. This calculation is as follows: Total length = Number of pieces \times Length of each piece
Total length = 33 pieces \times 1.66 feet/piece
When you do the multiplication: $33 \times 1.66 = 54.78$ feet
Rounding this to one decimal place results in 54.8 feet. This matches the choice C, which is the total length of the beam. Understanding this process is crucial in pipefitting and construction, as it applies to multiple scenarios involving material measurements and calculations. Always ensure to verify your unit measurements and arithmetic to achieve accurate calculations in practical applications.

3. What type of simple machine is a pulley considered to be?

- A. Lever
- B. Inclined Plane
- C. Wheel and Axle
- D. Fixed Pulley**

A pulley is a type of simple machine that consists of a wheel on an axle or shaft designed to support movement and change direction of force using a rope or cable. The correct answer, "Fixed Pulley," specifically refers to a type of pulley that is attached to a structure and does not move with the load. It changes the direction of the force applied to lift the load but does not provide a mechanical advantage in terms of reducing the amount of force needed. Understanding this, a fixed pulley allows the user to lift an object vertically by pulling down on one side of the rope, which is redirected over the wheel. This setup illustrates the mechanical principle of using a wheel to divert force direction, which aligns specifically with the definition of a fixed pulley. Other choices, such as lever or inclined plane, do not accurately describe the function of a pulley. A lever operates on a fulcrum to amplify force, while an inclined plane provides a sloped surface to move loads upward with less force, and neither captures the essence of what a fixed pulley does mechanically. The wheel and axle is a broader category of simple machines that includes pulleys but does not pinpoint the specific type that is being referred to here. Therefore, recognizing that a fixed pulley is the

4. What must be checked when replacing any grinding, finishing or brushing accessory?

- A. The RPM rating**
- B. The weight limit
- C. The material type
- D. The size of the accessory

When replacing grinding, finishing, or brushing accessories, it is essential to check the RPM (revolutions per minute) rating. This is crucial because the RPM rating indicates the maximum speed at which the accessory can safely operate. Each accessory is rated for a specific RPM range, and using it beyond that limit can lead to dangerous situations, including the risk of the accessory breaking apart due to excessive centrifugal force. Choosing an accessory with a compatible RPM rating ensures safe performance and helps prevent accidents that can arise from higher speeds than the accessory can withstand. It is a fundamental safety requirement during such replacements. The other aspects like weight limit, material type, and size, while they may matter depending on the context, do not directly impact the operational safety and effectiveness of the accessory in the same critical way as the RPM rating does.

5. How should an empty cylinder be marked?

- A. Full
- B. MT**
- C. Empty
- D. Hazardous

Marking an empty cylinder properly is essential for safety and compliance with regulations. The correct designation for an empty cylinder is "MT," which stands for "empty" or "metal tank." This marking helps distinguish empty cylinders from those that are full or pressurized, providing critical information to users who handle the cylinders. The "MT" marking is recognized in various industries and is an important part of compliance with safety standards. It ensures that employees and safety personnel can readily identify that a cylinder does not contain any pressurized gas, which helps prevent accidents and misuse. In contrast, markings such as "Full," "Empty," or "Hazardous" are either misleading or do not convey the specific information that "MT" does. "Full" indicates that the cylinder is pressurized and contains gas, which is the opposite of what needs to be communicated for an empty cylinder. "Empty" can be ambiguous and may not meet regulatory standards, while "Hazardous" refers specifically to cylinders containing dangerous materials rather than their pressure state. Therefore, using "MT" is the most effective and compliant way to mark an empty cylinder.

6. Which of the following describes galvanized bending quality pipe?

- A. A glass lined pipe
- B. Treated in a special way to prevent flaking**
- C. Pipe that is required to be cleaned free of rust
- D. Thoroughly cleaned with a protective coating

Galvanized bending quality pipe is specifically treated to prevent flaking, which is crucial in maintaining the pipe's integrity during bending and subsequent use. The galvanization process involves coating the pipe with a layer of zinc, which not only protects it from corrosion but also helps to ensure that the coating remains intact during the bending process. If the zinc layer were to flake off, it could lead to weaknesses in the pipe and potential failure during use. Other options describe different aspects of pipe characteristics or treatments not specifically related to the definition of galvanized bending quality pipe. For instance, while there are requirements for cleaning pipes free of rust or applying protective coatings, these processes do not capture the essence of what makes the bending quality pipe specifically galvanized and designed to prevent flaking. Thus, the emphasis on preventing flaking is what makes option B the correct choice.

7. When measuring pipe lengths, what is a common method for ensuring proper fit?

- A. Cutting with a hacksaw**
- B. Using a pipe cutter**
- C. Marking with chalk**
- D. None of the above**

Using a pipe cutter is a common method for ensuring proper fit when measuring pipe lengths due to its ability to create clean, precise cuts. A pipe cutter effectively scores the pipe and then applies pressure to create a clean break, leading to a square, burr-free edge. This precision minimizes the need for additional finishing, which is essential in pipefitting to ensure a proper seal and fit with fittings, joints, or other pipe sections. Accurate cuts are critical for maintaining integrity in systems that have to withstand pressure and prevent leaks. In contrast, cutting with a hacksaw can result in uneven edges and may leave burrs that need to be cleaned up, which can compromise the fit. Marking with chalk might help in determining where to cut, but it does not influence the quality of the cut itself, which is crucial for achieving proper fit. The option indicating "None of the above" does not apply because the use of a pipe cutter is a recognized standard practice in the industry.

8. What is the decimal value of 0.45 expressed in words?

- A. Forty-five hundredths**
- B. Four hundred fifty thousandths**
- C. Four point five**
- D. Forty-five thousandths**

The decimal value of 0.45 can be expressed in words as "forty-five hundredths." This is because the number 0.45 consists of two digits after the decimal point. The first digit, 4, refers to the tenths place, and the second digit, 5, refers to the hundredths place. Therefore, together they equal forty-five hundredths. When we analyze the other options, they represent different interpretations of decimal numbers. "Four hundred fifty thousandths" would correspond to the decimal 0.450, which is different from 0.45, though they are numerically equivalent. "Four point five" suggests the decimal value of 4.5, which is far greater than 0.45. Lastly, "forty-five thousandths" would correspond to the decimal 0.045, not the intended 0.45. Hence, "forty-five hundredths" accurately captures the correct representation of the decimal value.

9. True or False: A butterfly valve is a type of check valve.

A. True

B. False

C. Depends on the application

D. Only in certain sizes

A butterfly valve is designed for throttling flow and is characterized by a rotating disc that regulates the flow of liquid or gas through a pipe. It is primarily used in applications where a quick shut-off is required or where flow regulation is necessary. In contrast, a check valve is specifically designed to prevent backflow in a piping system. It allows fluid to flow in one direction only, closing automatically if the flow reverses. The fundamental difference lies in their functions: butterfly valves can control the flow rate and direction, while check valves are solely for preventing backflow. Thus, stating that a butterfly valve is a type of check valve is inaccurate. The two serve different purposes in piping systems, which is why it is correct to assert that the statement is false.

10. Cutting oils should not exceed which of the following temperatures?

A. 225°F

B. 110°F

C. 190°F

D. 98°F

The correct temperature limit for cutting oils is 110°F. At this temperature, the effectiveness of cutting oils is maintained, which is crucial for the machining process. Cutting oils serve several important functions during machining operations, including cooling the cutting tool and workpiece, reducing friction, and helping to clear away chips and debris. When cutting oils exceed 110°F, their properties may begin to deteriorate. This can lead to a reduction in lubrication effectiveness, causing increased wear on tools, potential overheating of materials, and even the risk of combustion in certain situations. Maintaining the correct temperature is essential for ensuring optimal performance and safety during pipefitting and other machining tasks. The other temperature options exceed the ideal limit, potentially leading to the negative consequences mentioned. Keeping cutting oils at or below 110°F helps to ensure that the oils retain their viscosity and performance characteristics necessary for effective cutting operations.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

<https://pipefittingyear1.examzify.com>

We wish you the very best on your exam journey. You've got this!

SAMPLE