



CITY OF LANCASTER



PUBLIC WORKS
MAINTENANCE WORKER I/II

STUDY GUIDE & SAMPLE TEST QUESTIONS

As an Equal Opportunity Employer, the City of Lancaster takes steps to ensure that our exam content is job-related. Testing applicants for jobs provides us with an objective and cost-effective means to assess the qualifications of our applicants.

ABOUT THIS STUDY GUIDE

This study guide contains sample questions similar to those you will find on the Maintenance Worker I/II test. To get the most out of this booklet, work through the questions without looking at the answers. When you complete the test questions then look at the answers. Remember, the actual questions on the test may vary in content, format and level of difficulty.

HOW SHOULD I PREPARE FOR THE WRITTEN TEST?

To prepare for the written test, read the job announcement to determine the knowledge, skill, and ability areas the written test will cover. These are the areas you should study to prepare for the test.

Read the test notice for the location and time of the written test as well as for parking instructions and other important information. The test notice will tell you whether aids such as handheld calculators are allowed during the written test.

On the test day, you should arrive 15 minutes early, wear comfortable clothes, bring an accurate watch, and make sure you are well-rested. Also, remember to bring your test notice and a picture I.D. such as a driver license, or you may not be admitted into the test!

TEST-TAKING TIPS

The Maintenance Worker I/II exam will have a set time limit, so it is important that you work quickly. Read all the possible choices before selecting your answer. If you do not know the answer to a problem, skip it and move on to the next one. If there is time, you can return to the question you skipped at the end. Your score is based on the number of correct responses. If you are not sure of the answer to a problem, eliminate the answers you believe are wrong, and mark the choice that is your best response. Remember: budget your time, pace yourself, and avoid getting bogged down on any single question.

SAMPLE BASIC ARITHMETIC QUESTIONS

Basic arithmetic items test your knowledge of and ability to, interpret and solve problems of a mathematical nature. The following problems can be solved using addition, subtraction, multiplication and/or division. Answers and explanations for the problems begin on page 5 of this study guide.

1. 45 minutes is what fraction of an hour?

- A. $\frac{9}{15}$
- B. $\frac{9}{24}$
- C. $\frac{9}{12}$
- D. $\frac{9}{10}$

2. 65 is what percent of 500?

- A. 6
- B. 8
- C. 11
- D. 13

3.
$$\begin{array}{r} 9 \text{ days, } 5 \text{ hours, } 48 \text{ minutes} \\ 7 \text{ days, } 15 \text{ hours, } 9 \text{ minutes} \\ + 3 \text{ days, } 13 \text{ hours, } 13 \text{ minutes} \\ \hline \end{array}$$

- A. 19 days, 13 hours, 40 minutes
- B. 19 days, 12 hours, 30 minutes
- C. 20 days, 11 hours, 20 minutes
- D. 20 days, 10 hours, 10 minutes

4. If three – fifths of Stanley’s weekly income is \$360, what is one-third of his weekly income?

- A. \$150
- B. \$175
- C. \$200
- D. \$250

5. 80% of 35 =

- A. 26
- B. 27
- C. 28
- D. 29

6. $2568 \div 12 =$

- A. 212
- B. 213
- C. 214
- D. 215

7. 5.278 subtracted from 11.700 =

- A. 6.342
- B. 6.422
- C. 7.342
- D. 6.432

8. What is the sum of 102.35, 65.89, 5.74, 8, 42.5896?

- A. 024.5690
- B. 224.5696
- C. 224.5690
- D. 225.5690

ANSWERS AND EXPLANATIONS TO ARITHMETIC SAMPLE QUESTIONS

Note: Typically, there are multiple ways of obtaining the correct answer to each question, only one of which is provided as the answer explanation.

1. **Correct Answer: C**

- One hour has 60 minutes. So the question is asking what part is 45 of 60? When you divide 45 by 60 you get .75 which when reduced by its lowest common denominator to a fraction is $\frac{3}{4}$. You are also asked to express the answer as a fraction using 9 as the numerator. To get to 9 you must multiply both the numerator and denominator by 3. So if you multiply $\frac{3}{4} \times \frac{3}{3}$ you get $\frac{9}{12}$.

2. **Correct Answer: D**

- Divide 65 by 500. Set up the problem by adding a decimal and zero placeholders (shown in bold) to make 65 into 65.**00**. After you have completed the division you need to determine the decimal place for the answer. To do this start by counting the number of zero placeholders you added to 65 to make it divisible by 500. Since two zeros were added to 65, count backwards from right to left two decimal places to convert the answer to .13 (Step #1).

Step #1

$$\begin{array}{r}
 .13 \\
 \hline
 500 \overline{)65.00} \\
 \underline{-50.00} \\
 15.00 \\
 \underline{15.00} \\
 0
 \end{array}$$

To convert a decimal to a percent move the decimal point two places to the right.

Step #2: Example: $.13 = 13\%$. Note: $.132 = 13.2\%$ and $1.324 = 132.4\%$

3. **Correct Answer: D**

- Add the measurements in the minute's column for a total of 70 minutes (Step #1).
- Since 60 minutes equals 1 hour, convert the 70 minutes into 1 hour, 10 minutes; carry the 1 hour into the hours measurement column; and sum for a total of 34 hours, 10 minutes (Step #2).
- Since 24 hours equals 1 day, convert the 34 hours into 1 day, 10 hours; carry the 1 day into the days measurement column; and sum for a total of 20 days (Step #3).

| <u>Step #1</u> | <u>Step #2</u> | <u>Step #3</u> |
|-------------------------------------|--------------------------------|--------------------------------------|
| | 1 hour | 1 day 1 hour |
| 9 days, 5 hours, 48 minutes | 9 days, 5 hours, 48 minutes | 9 days, 5 hours, 48 minutes |
| 7 days, 15 hours, 9 minutes | 7 days, 15 hours, 9 minute | 7 days, 15 hours, 9 minutes |
| <u>3 days, 13 hours, 13 minutes</u> | + 3 days, 13 hours, 13 minutes | + 3 days, 13 hours, 13 minutes |
| 70 minutes | <u>34 hours, 10 minutes</u> | <u>20 days, 10 hours, 10 minutes</u> |

4. **Correct Answer: C**

- Since \$360 is three-fifths of Stanley's income, divide 360 by 3 to determine that \$120 is one fifth of his income (Step #1).
- Multiply \$120 by 5 to determine that \$600 is Stanley's weekly income (Step #2).
- Divide \$600 by 3 to determine that \$200 is one-third of his weekly income (Step #3).

| <u>Step #1</u> | <u>Step #2</u> | <u>Step #3</u> |
|---|---|---|
| $\begin{array}{r} 120 \\ 3 \overline{)360} \\ \underline{-3} \\ 06 \\ \underline{-6} \\ 00 \end{array}$ | $\begin{array}{r} 120 \\ \underline{\times 5} \\ 600 \end{array}$ | $\begin{array}{r} 200 \\ 3 \overline{)600} \\ \underline{-6} \\ 00 \\ \underline{-0} \\ 00 \end{array}$ |

5. **Correct Answer: C**

- To convert a percent to a decimal move the decimal point two places to the left.

Example: 80% = .80 or .8

- Multiply 35 by the decimal equivalent of 80% (.8) and insert the decimal point in the product one place from the right, as the factors 35 and .8 have a total of one decimal place (Step #1).

Step #1

$$\begin{array}{r} 35 \\ \underline{\times .8} \\ 28.0 \end{array}$$

6. **Correct Answer: C**

- Set up the problem by placing the number to be divided (2568) inside the bar and the divisor (12) to the left of the vertical bar (Step #1).
- Determine how many times 25 can be divided by 12 and place the number (2) over the 25. Multiply the number (2) by the divisor (12) and subtract the result (24) from the number divided (25) to equal the remainder 1 (Step #2).
- Carry down the next digit in 2568 (6) by placing it next to the remainder from Step #2, to equal 16 (Step #3).
- Repeat Step #2 and Step #3 until all the possibilities of division have been exhausted and there are no other numbers to be divided (Step #4).

| <u>Step #1</u> | <u>Step #2</u> | <u>Step #3</u> | <u>Step #4</u> |
|------------------------|--|---|--|
| $12 \overline{) 2568}$ | $\begin{array}{r} 2 \\ 12 \overline{) 2568} \\ \underline{-24} \\ 1 \end{array}$ | $\begin{array}{r} 2 \\ 12 \overline{) 2568} \\ \underline{-24} \\ 16 \end{array}$ | $\begin{array}{r} 214 \\ 12 \overline{) 2568} \\ \underline{-24} \\ 16 \\ \underline{-12} \\ 48 \\ \underline{-48} \\ 0 \end{array}$ |

7. **Correct Answer: B**

- Set up the problem by lining up numbers vertically, aligning all decimal points (Step #1).
- Working right to left, set up the problem for solving by carrying values over only when the top value for a column is less than its bottom value (Step #2).
- Subtract all values to determine the difference (Step #3).

| Step #1 | Step #2 | Step #3 |
|---|--|---|
| $\begin{array}{r} 11.700 \\ \underline{-5.278} \end{array}$ | $\begin{array}{r} 6910 \\ 10.\overline{700} \\ \underline{-5.278} \end{array}$ | $\begin{array}{r} 6910 \\ 10.\overline{700} \\ \underline{-5.278} \\ 6.422 \end{array}$ |

8. **Correct Answer: B**

- Write down the numbers, one under the other, with the decimal points lined up (Step #1).
- Add zeros so the numbers have the same length (Step #2).
- Then add normally, remembering to put the decimal point in the answer (Step #3).

| Step #1 | Step #2 | Step #3 |
|----------------|----------------|------------------|
| 102.35 | 102.3500 | 102.3500 |
| 65.89 | 65.8900 | 65.8900 |
| 5.74 | 5.7400 | 5.7400 |
| 8 | 8.0000 | 8.0000 |
| <u>42.5896</u> | <u>42.5896</u> | <u>+ 42.5896</u> |
| | | 224.5696 |

SAMPLE READING COMPREHENSION QUESTIONS

Reading comprehension questions test your ability to read and understand written material. Answers and explanations for the questions are provided on page 10 of this study guide.

Instructions: For each question, read the information provided and answer the question that follows.

1. The Toy Loan Program is a free service that allows children to borrow toys from a Toy Loan Center in the same manner in which they borrow books from the public library. The children borrow toys once a week. It is a voluntary community effort sponsored by the Los Angeles County Board of Supervisors and the Department of Public Social Services. Each year, citizens donate thousands of repairable, discarded toys to Toy Loan. Crews repair and assemble items from parts of other toys. The finished product looks as good as new. After toys are repaired, assembled and painted, they are recycled into the various toy-lending centers. Many manufacturers and companies also donate toys to Toy Loan.

The passage implies that

- A. Once a year, citizens of the community donate toys to the Toy Loan Program.
 - B. The Toy Loan Program has noticed an increase in the number of toys they have received.
 - C. A broken toy can have some of its workable parts recycled for use in the repair of other toys.
 - D. Toy Loan Centers are staffed by volunteer citizens that lend toys to the children of the community.
2. In arbitration, each side in the dispute presents its case, including evidence, to a neutral third party called an “arbitrator,” rather than to a judge. The arbitrator, who is an attorney, issues an award based on the evidence just as a judge would, within a time frame set by the Court. Although evidence is presented, arbitration is a less formal process than litigation. Arbitration may be “binding” or non-binding” depending on what the parties agree to before beginning the process. “Non-binding arbitration” means that the participants in the case are not required to accept the arbitrator’s award; they may request a “trial de novo” which returns the case to the Court’s calendar as if the arbitration had not occurred. It is important for parties to understand that, in agreeing to binding arbitration or by not requesting a trial de novo, they are waiving their right to a trial and are accepting the arbitrator’s award as a final decision.

Based on the information provided,

- A. Arbitration is not independent of the Court’s influence
- B. The arbitrator’s determination of an award is not formally tied to laws, as a court determination would be.
- C. The use of arbitration is increasing as it leads to a faster resolution than a traditional court trial.
- D. The records of the arbitration are submitted to the Courts if a case is returned for a decision under a “trial de novo.”

Answers and Explanations to Reading Comprehension Questions

1. The correct answer is **C**. The passage states that crews “repair and assemble items from parts of other toys. The finished product looks as good as new.” This implies that some workable parts can be recycled for use in repair.
2. The correct answer is **A**. The passage states that the arbitration occurs within a time frame “set by the Court,” and that non-binding arbitration may return the case to the Court’s calendar as a trial de novo.