

# Bricklayers and Allied Craftworkers Local 9 PA

## **SAMPLE** Apprentice Applicants Evaluation

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ SCORE: \_\_\_\_\_

### **DIRECTIONS**

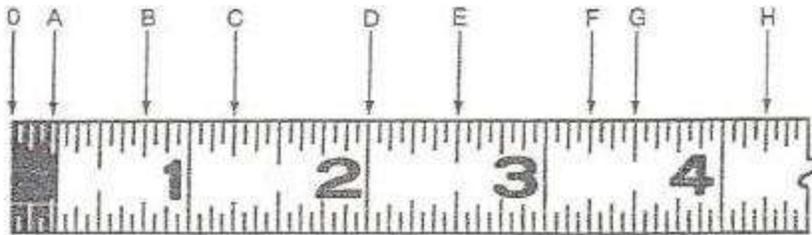
1. Print your name and date clearly on the space provided.
2. Please read and, follow all directions carefully.
3. Cell phones must be turned off or on silent mode.
4. Calculators are not permitted.
5. You will have one hour to complete this evaluation.
6. No talking is permitted during the evaluation.
7. Anyone caught cheating will be asked to leave the building.

# SAMPLE

## Directions Part 1

The first step in being able to make accurate measurements is to-become familiar with the graduations on rules and how to read them.

Read the folding rule illustrated below to the nearest quarter inch. Write your answers on the blanks provided.

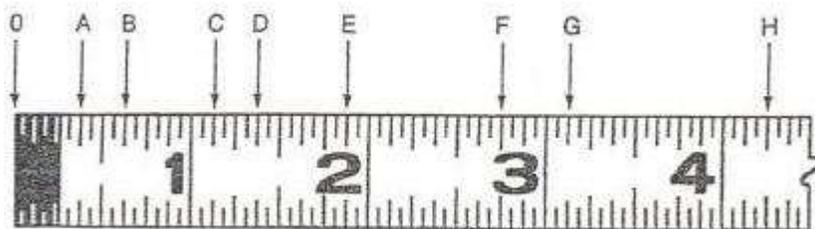


1. 0 to D = \_\_\_\_\_
2. A to C = \_\_\_\_\_
3. 0 to F = \_\_\_\_\_
4. A to E = \_\_\_\_\_
5. B to G = \_\_\_\_\_
6. 0 to F = \_\_\_\_\_
7. C to F = \_\_\_\_\_
8. B to G = \_\_\_\_\_
9. D to H = \_\_\_\_\_
10. A to G = \_\_\_\_\_

# SAMPLE

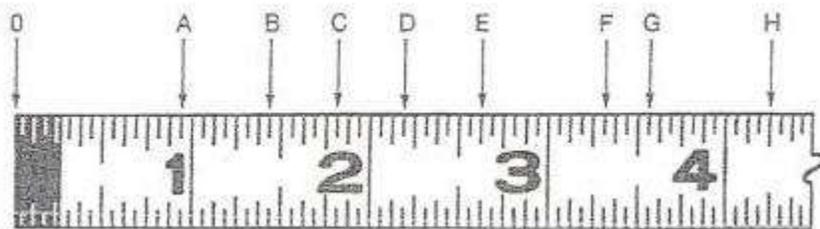
## Directions Part 2

Read the folding rule illustrated below to the nearest eighth inch. Write your answers on the blanks provided.



- 0 to B = \_\_\_\_\_
- A to C = \_\_\_\_\_
- 0 to E = \_\_\_\_\_
- B to C = \_\_\_\_\_
- A to D = \_\_\_\_\_
- 0 to G = \_\_\_\_\_
- D to G = \_\_\_\_\_
- C to H = \_\_\_\_\_
- A to G = \_\_\_\_\_
- E to F = \_\_\_\_\_

**Directions Part 3** Read the folding rule illustrated below to the nearest sixteenth inch. Write your answers on the blanks provided.



- 0 to B = \_\_\_\_\_
- A to C = \_\_\_\_\_
- 0 to D = \_\_\_\_\_
- B to E = \_\_\_\_\_
- A to F = \_\_\_\_\_
- 0 to G = \_\_\_\_\_
- C to E = \_\_\_\_\_
- A to F = \_\_\_\_\_
- 0 to G = \_\_\_\_\_
- E to G = \_\_\_\_\_

# SAMPLE

## Basic Math

### Student Version

#### Assignment Sheet 1—Add Whole Numbers

#### Directions

Solve the following addition problems.

Examples:

$\begin{array}{r} 5 \\ + 10 \\ \hline 15 \end{array}$	$\begin{array}{r} 1 \leftarrow \text{Carried Digit} \\ 67 \\ + 25 \\ \hline 92 \end{array}$	$\begin{array}{r} 11 \leftarrow \text{Carried Digits} \\ 539 \\ 333 \\ + 432 \\ \hline 1304 \end{array}$
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a. Solve each of the following addition problems. Show your work.

1.  $3+7=$ \_\_\_\_\_

2.  $8+9=$ \_\_\_\_\_

3.  $13+12=$ \_\_\_\_\_

4.  $23+7=$ \_\_\_\_\_

5.  $68+31=$ \_\_\_\_\_

6.  $6+31+42=$ \_\_\_\_\_

7.  $54+77+88=$ \_\_\_\_\_

8.  $357+308+243=$ \_\_\_\_\_

9.  $270+280+264=$ \_\_\_\_\_

10.  $3300+4222+3643=$ \_\_\_\_\_

b. Solve the following word problems. Show your work in the spaces provided. Write your answers on the blanks.

1. An apprentice carries 233 bricks to one bricklayer, 198 bricks to another and 213 bricks to a third. What is the total number of bricks the apprentice carries?

Total bricks carried = \_\_\_\_\_

2. If a bricklayer used 687 bricks on one wall, 595 bricks on another, and 650 on another, how many bricks were used?

Total bricks used = \_\_\_\_\_

# SAMPLE

3. A contractor uses 62,000 bricks and orders 3,100 more to complete the job. How many bricks does the job require?

Total bricks = \_\_\_\_\_

4. A job requires 712 concrete blocks for the north wall, 689 for the south wall, 863 for the east wall, and 743 for the west wall. How many concrete blocks are required for the job?

Total concrete blocks = \_\_\_\_\_

5. A bricklayer lays 721 bricks the first day, 760 the second day, and 700 the third day. How many bricks are laid in the three days?

Total bricks laid = \_\_\_\_\_

6. At different times during the month, a mason purchases 140, 165, 241, 72, and 335 bags of Portland cement. How many bags of cement were purchased?

Total bags of Portland cement purchased = \_\_\_\_\_

7. At different times, a contractor receives these amounts of modular brick on the job: 14,270; 5,000; 3,997; and 8,623. What is the total number of bricks that the contractor receives?

Total bricks received = \_\_\_\_\_

8. Five bins of scrap masonry contain load weights of 745 pounds, 799 pounds, 106 pounds, 226 pounds, and 779 pounds. What is the total weight of the scrap material?

Total weight = \_\_\_\_\_ lbs.

9. Given the total weight of masonry scrap in the bins for each day of the week in the following table calculate the following:

- The total daily weights
- The total week weight for each bin

	Bin #1 (lbs.)	Bin #2 (lbs.)	Bin #3 (lbs.)	Total Daily Weight (lbs.)
Monday	89	372	154	
Tuesday	93	207	117	
Wednesday	124	222	398	
Thursday	47	190	237	
Friday	188	308	174	
Total Week Weight				

- Which bin collected the most masonry scrap for the entire week? \_\_\_\_\_

10. A contractor places his order for concrete blocks: 340 corner blocks, 60 wood sash jamb blocks, 240 bullnose blocks, 440 double comer blocks, 1670 two-core blocks, and 698 L-blocks. How many concrete blocks are ordered?

Total concrete blocks ordered = \_\_\_\_\_

# SAMPLE

Adding mixed numbers:

Example: Add  $3 \frac{5}{8} + 7 \frac{5}{8}$ .

1. Add numerators

Example:  $\frac{5+5}{8} = 10/8$

2. Change improper fraction to mixed number and reduce to lowest terms if necessary.

Example:  $10/8 = 10 \div 8 = 1 \frac{2}{8} = 1 \frac{1}{4}$

3. Add whole numbers and fractions.

Example:  $3 + 7 + 1 + \frac{1}{4} = 11 \frac{1}{4}$  Answer

a. Add the following fractions. Show your work in the space provided below the problems. Reduce to lowest terms if necessary. Write your answers on the blanks beside the problems.

1.  $7/16 + 4/16 =$  \_\_\_\_\_

2.  $3/8 + 7/8 =$  \_\_\_\_\_

3.  $1/4 + 3/4 =$  \_\_\_\_\_

4.  $2/16 + 3/4 =$  \_\_\_\_\_

5.  $7/16 + 7/8 =$  \_\_\_\_\_

6.  $5/8 + 8/16 =$  \_\_\_\_\_

7.  $1/4 + 6/32 =$  \_\_\_\_\_

8.  $7/16 + 3/4 =$  \_\_\_\_\_

9.  $11/16 + 3/4 =$  \_\_\_\_\_

10.  $4/4 + 12/32 =$  \_\_\_\_\_

## SAMPLE

a. Subtract the proper fractions given below. Show your work in the spaces provided. Reduce to lowest terms if necessary. Write your answers on the blanks.

1.  $1/2 - 7/16 =$  \_\_\_\_\_
2.  $13/16 - 9/32 =$  \_\_\_\_\_
3.  $3/4 - 3/8 =$  \_\_\_\_\_
4.  $7/8 - 6/16 =$  \_\_\_\_\_
5.  $15/16 - 3/8 =$  \_\_\_\_\_
6.  $30/32 - 3/4 =$  \_\_\_\_\_
7.  $7/8 - 1/4 =$  \_\_\_\_\_
8.  $25/32 - 5/8 =$  \_\_\_\_\_
9.  $3/4 - 3/16 =$  \_\_\_\_\_
10.  $7/8 - 2/16 =$  \_\_\_\_\_

b. Subtract the following fractions from whole numbers. Show your work in the spaces provided. Reduce to lowest terms if necessary. Write your answers on the blanks.

1.  $7 - 3/4 =$  \_\_\_\_\_
2.  $2 - 15/16 =$  \_\_\_\_\_
3.  $29 - 13/32 =$  \_\_\_\_\_
4.  $145 - 4/5 =$  \_\_\_\_\_
5.  $9 - 61/64 =$  \_\_\_\_\_
6.  $10 - 1/2 =$  \_\_\_\_\_
7.  $66 - 7/8 =$  \_\_\_\_\_
8.  $12 - 3/16 =$  \_\_\_\_\_
9.  $30 - 5/8 =$  \_\_\_\_\_
10.  $46 - 1/4 =$  \_\_\_\_\_