

## Construction Math Problems

1. In the number 37,945, the number 7 is in the \_\_\_\_\_ place?

- a. Units
- b. tens
- c. hundreds
- d. thousands

2. The number for the words *two thousand six hundred eighty-nine* is \_\_\_\_\_.

- a. 2,286
- b. 2,689
- c. 6,289
- d. 20,689

3. A project has 8 workers on one job, 35 on another, and 18 on a third. The total number of people working on all three jobs is \_\_\_\_\_.

- a. 53
- b. 61
- c. 71
- d. 133

4. A bricklayer lays 649 bricks the first day, 632 the second day, and 473 the third day. The bricklayer laid \_\_\_\_\_ bricks in three days.

- a. 1,754
- b. 1,760
- c. 1,769
- d. 1,770

5. Four walls of a bathroom require 31, 46, 49, and 16 tiles. You will need \_\_\_\_\_ tiles to tile all four walls.

- a. 132
- b. 142
- c. 144
- d. 152

6. For eight different jobs, you need to fill a total of eight boxes with different numbers of a specified size of brightwood screw. The numbers of screws you need to put in the boxes are 142, 57, 35, 79, 53, and 95. You will need a total of \_\_\_\_\_ screws to fill all eight boxes.

- a. 562

- b. 573
- c. 461
- d. 592

7. You have already used 36,000 bricks, and your supervisor orders 1,500 more to complete the job. The job requires a total of \_\_\_\_\_ bricks.

- a. 35,500
- b. 36,500
- c. 37,000
- d. 37,500

8. You have a piece of wood that measures 86 inches. You cut off a 12-inch piece. The remaining piece of wood measures \_\_\_\_\_ inches.

- a. 70
- b. 74
- c. 76
- d. 78

9. Yesterday, a supply yard contained 93 tons of sand. Since then, 27 tons were removed. The supply yard now contains \_\_\_\_\_ tons of sand.

- a. 66
- b. 76
- c. 79
- d. 86

10. A total of 1,478 feet of cable was supplied for a job. Only 489 feet were installed. There are \_\_\_\_\_ feet of cable remaining.

- a. 978
- b. 980
- c. 989
- d. 1,099

11. A roof requires 11 trusses. A company is building 8 roofs. The company will need to order \_\_\_\_\_ trusses.

- a. 78
- b. 80
- c. 88
- d. 98

12. A worker has been asked to deliver 15 scaffolds to each of 26 sites. The worker will deliver a total of \_\_\_\_\_ scaffolds.

- a. 120
- b. 240
- c. 390
- d. 420

13. If cast-iron pipe weighs 8 pounds per foot, 65 feet weighs \_\_\_\_\_ pounds.

- a. 280
- b. 320
- c. 430
- d. 520

14. You have 5,814 feet of rope. You want to cut it into 27-foot sections. You will be able to cut \_\_\_\_\_ sections and will have \_\_\_\_\_ feet left over.

- a. 215; 9
- b. 218; 3
- c. 220; 6
- d. 222; 2

15. If tubing costs \$4.00 a foot and you pay a total of \$448.00, you have purchased \_\_\_\_\_ whole feet of tubing.

- a. 40
- b. 80
- c. 112
- d. 122

16. You need to lay a line of bricks that is 96 inches long. Each brick is 4 inches long. You will need \_\_\_\_\_ bricks to build the wall.

- a. 12
- b. 18
- c. 24
- d. 30

17. Your company is working on three projects. Project A requires 72 rolls of insulation, Project B requires 456 rolls of insulation,

and Project C requires 125 rolls of insulation. You need to order a total of \_\_\_\_ rolls of insulation for all three projects.

- a. 653
- b. 749
- c. 820
- d. 943

18. You need to install 17 faucets in each of 5 buildings. You will install a total of \_\_\_\_ faucets.

- a. 75
- b. 85
- c. 95
- d. 105

Find the equivalents of the following measurements.

19.  $\frac{3}{8}$  inch = \_\_\_\_/64 inch.

- a. 3
- b. 6
- c. 24
- d. 36

20.  $\frac{5}{16}$  inch = \_\_\_\_/16 inch

- a. 5
- b. 7
- c. 10
- d. 16

21.  $\frac{1}{2}$  inch = \_\_\_\_/16 inch

- a. 1
- b. 2
- c. 4
- d. 8

Reduce these fractions to their lowest terms.

22.  $\frac{16}{64}$  = \_\_\_\_

- a.  $\frac{8}{32}$
- b.  $\frac{4}{16}$
- c.  $\frac{1}{4}$
- d.  $\frac{1}{2}$

23.  $\frac{8}{16}$  = \_\_\_\_

- a.  $\frac{1}{8}$
- b.  $\frac{1}{4}$
- c.  $\frac{1}{2}$
- d.  $\frac{2}{8}$

24.  $\frac{2}{4}$  = \_\_\_\_

- a.  $\frac{1}{8}$
- b.  $\frac{1}{4}$
- c.  $\frac{1}{2}$
- d.  $\frac{2}{4}$

Find the lowest common denominator for the following pairs of fractions.

25.  $\frac{8}{64}$ ,  $\frac{1}{32}$

The answer is \_\_\_\_.

- a. 32
- b. 17
- c. 15
- d. 9

26.  $\frac{3}{4}$ ,  $\frac{8}{16}$

The answer is \_\_\_\_.

- a. 2
- b. 3
- c. 4
- d. 12

27.  $\frac{4}{12}$ ,  $\frac{5}{15}$

The answer is \_\_\_\_.

- a. 0
- b. 1
- c. 2
- d. 3

28.  $\frac{1}{2}$ ,  $\frac{1}{8}$

The answer is \_\_\_\_.

- a. 2
- b. 4
- c. 8
- d. 16

Find the answers to the following problems and reduce the fractions to the lowest terms.

29.  $\frac{7}{16} + \frac{1}{4}$  = \_\_\_\_.

- a.  $\frac{8}{16}$
- b.  $\frac{11}{16}$
- c.  $\frac{28}{16}$
- d.  $\frac{3}{6}$

30.  $\frac{3}{8} + \frac{9}{16}$  = \_\_\_\_.

- a.  $\frac{7}{8}$
- b.  $\frac{15}{16}$
- b.  $\frac{3}{4}$
- d.  $\frac{12}{16}$

31.  $\frac{11}{32} - \frac{2}{8}$  = \_\_\_\_.

- a.  $\frac{9}{32}$
- b.  $\frac{19}{32}$
- c.  $\frac{3}{32}$
- d.  $\frac{1}{8}$

32.  $18 - \frac{7}{8}$  = \_\_\_\_.

- a.  $18 \frac{7}{8}$
- b.  $18 \frac{1}{8}$
- c.  $17 \frac{7}{8}$
- d.  $17 \frac{1}{8}$

33.  $\frac{9}{16} \times \frac{2}{4}$  = \_\_\_\_.

- a.  $\frac{18}{64}$
- b.  $\frac{9}{32}$
- c.  $\frac{11}{20}$
- d.  $\frac{9}{16}$

34.  $\frac{1}{8}$  of 72 is \_\_\_\_.

- a. 8
- b.  $8 \frac{1}{2}$
- c. 9
- d. 12

35. On a scale drawing, if  $\frac{1}{2}$  inch represents a distance of 1 foot, then a line on the drawing measuring  $5 \frac{1}{2}$  inches long represents \_\_\_\_ feet.

- a.  $5 \frac{1}{2}$
- b. 7
- c. 10
- d. 11

36.  $\frac{9}{16}$  divided by  $\frac{7}{8}$  = \_\_\_\_.

- a.  $\frac{63}{128}$
- b.  $\frac{7}{16}$
- c.  $\frac{23}{16}$
- d.  $\frac{9}{14}$

37.  $\frac{7}{16}$  divided by 7 = \_\_\_\_.

- a.  $\frac{1}{64}$
- b.  $\frac{1}{16}$
- c.  $2 \frac{17}{16}$
- d.  $\frac{1}{7}$

38. You can cut \_\_\_\_  $\frac{3}{16}$ -inch lengths from a 9-inch strip.

- a. 16
- b. 33
- c. 48
- d. 64