

PRACTICE QUIZ 1

1. Write $0.\overline{1}$ as a percent.

- A. $0.\overline{1}\%$
- B. $1.\overline{1}\%$
- C. $11.\overline{1}\%$
- D. $111.\overline{1}\%$

2. Change $0.\overline{63}$ to a fraction. Simplify completely.

- A. $\frac{5}{9}$
- B. $\frac{7}{11}$
- C. $\frac{2}{3}$
- D. $\frac{5}{6}$

3. $\frac{2}{3} + \frac{1}{4}$

- A. $\frac{3}{7}$
- B. $\frac{11}{12}$
- C. 1
- D. $1\frac{1}{6}$

4. $\frac{4}{5} - \frac{1}{6}$

- A. $\frac{3}{5}$
- B. $\frac{14}{15}$
- C. $\frac{5}{6}$

D. $\frac{19}{30}$

5. $1\frac{1}{4} \times 1\frac{1}{2}$

A. $1\frac{1}{8}$

B. $1\frac{1}{3}$

C. $1\frac{2}{3}$

D. $1\frac{7}{8}$

6. $1\frac{5}{6} \div 1\frac{1}{3}$

A. $1\frac{5}{18}$

B. $1\frac{3}{8}$

C. $2\frac{4}{9}$

D. $3\frac{1}{6}$

7. A store has 75 pounds of bananas. Eight customers buy 3.3 pounds, five customers buy 4.25 pounds, and one customer buys 6.8 pounds. How many pounds are left in stock?

A. 19.45

B. 19.55

C. 20.45

D. 20.55

8. Sarah got a $\frac{21}{25}$ back on her college exam. Approximately what percentage did she earn?

A. 84%

B. 92%

C. 88%

D. 96%

9. A high school is using one of their training loops for a cross-country meet. The loop is equivalent to $\frac{5}{6}$ of a mile. If the participants need to run the loop 4 times, how long is the race?

A. $2\frac{1}{2}$

B. $3\frac{5}{6}$

C. $3\frac{1}{3}$

D. $4\frac{1}{3}$

10. A construction site manager buys each of his workers a box of 500 nails to keep in their belt while they work. One worker uses $\frac{1}{4}$ of a box, while the other workers use $\frac{2}{5}$, and $\frac{9}{10}$. How many nails are left between all of the workers?

A. 50

B. 125

C. 450

D. 725

11. Logan gets his hourly salary raised from \$9.50 an hour to \$10.25 an hour. What percentage did his wage increase?

A. 9.3%

B. 12.7%

C. 7.5%

D. 7.9%

12. If a tree grows an average of 4.2 inches in a day, what is the rate of change in its height per month? Assume a month is 30 days.
- A. 0.14 inches per month
 - B. 4.2 inches per month
 - C. 34.2 inches per month
 - D. 126 inches per month

PRACTICE QUIZ 1 — ANSWER KEY

1. C. The correct answer is $11.\bar{1}\%$ because $0.\bar{1}$ as a percent is $0.\bar{1} \times 100 = 11.\bar{1}\%$. See Lesson: Decimals and Fractions.

2. B. The correct solution is $\frac{7}{11}$. Let $n = 0.\bar{63}$ and $100n = 63.\bar{63}$. Then, $100n - n = 63.\bar{63} - 0.\bar{63}$ resulting in $99n = 63$ and solution of $n = \frac{63}{99} = \frac{7}{11}$. See Lesson: Decimals and Fractions.

3. B. The correct solution is $\frac{11}{12}$ because $\frac{2}{3} + \frac{1}{4} = \frac{8}{12} + \frac{3}{12} = \frac{8+3}{12} = \frac{11}{12}$. See Lesson: Addition and Subtraction of Fractions.

4. D. The correct solution is $\frac{19}{30}$ because $\frac{4}{5} - \frac{1}{6} = \frac{24}{30} - \frac{5}{30} = \frac{24-5}{30} = \frac{19}{30}$. See Lesson: Addition and Subtraction of Fractions.

5. D. The correct solution is $1\frac{7}{8}$ because $\frac{5}{4} \times \frac{3}{2} = \frac{15}{8} = 1\frac{7}{8}$. See Lesson: Multiplication and Division of Fractions.

6. B. The correct answer is $1\frac{3}{8}$ because $\frac{11}{6} \div \frac{4}{3} = \frac{11}{6} \times \frac{3}{4} = \frac{33}{24} = 1\frac{9}{24} = 1\frac{3}{8}$. See Lesson: Multiplication and Division of Fractions.

7. D. The correct solution is 20.55 because the number of pounds purchased is $8(3.3) + 5(4.25) + 6.8 = 26.4 + 21.25 + 6.8 = 54.45$ pounds. The number of pounds remaining is $75 - 54.45 = 20.55$ pounds. See Lesson: Decimals and Fractions.

8. A. Sarah earned an 84% on her exam because $\frac{21}{25} = \frac{84}{100}$ or 84%. See Lesson: Ratios, Proportions, and Percentages.

9. C. The participants run a total of $3\frac{1}{3}$ miles because $\frac{5}{6} \times \frac{4}{1} = \frac{20}{6} = 3\frac{1}{3}$ miles. See Lesson: Multiplication and Division of Fractions.

10. D. There are 725 nails left amongst all of the workers. Multiplying the fractions by the number of nails each worker was given reveals that the first worker used 125 nails, the second used 200 nails, and the last worker used 450. Altogether they used 775 nails out of the 1500. $1500 - 775 = 725$ nails that remain. See

Lesson: Addition and Subtraction of Fractions.

11. D. The difference between Logan's salary is 75 cents because $\$10.25 - \$9.50 = \$0.75$. Setting up a proportion reveals that 75 cents of an originally \$9.50 an hour salary is a 7.9% increase. See Lesson: Ratios, Proportions, and Percentages.

12. D. The rate of change is 126 inches per month. One approach is to set up a proportion.

$$\frac{1\text{day}}{4.2\text{inches}} = \frac{30\text{days}}{?}$$

Since 1 month is equivalent to 30 days, multiply the rate of change per day by 30 to get the rate of change per month. 4.2 inches multiplied by 30 is 126 inches. Thus, the growth rate is 126 inches per month. See Lesson: Ratios, Proportions, and Percentages.

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