

ACCUPLAC

CollegeBoard

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# Arithmetic

Sample Questions

College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world's leading education institutions and is dedicated to promoting excellence

## Sample Questions

1. Which of the following is equivalent to 0.06?

- $\frac{1}{6}$
- $\frac{1}{60}$
- $\frac{6}{10}$
- $\frac{6}{100}$

2. A number 36 is divided by 12, and the result is multiplied by 12. What is the final result?

- 48
- 108
- 422
- 432

3. Which of the following is equivalent to  $\frac{4}{10} + \frac{3}{100}$ ?

- $\frac{43}{100}$
- $\frac{43}{110}$
- $\frac{7}{10}$
- $\frac{7}{110}$

4. A number is divided by 31, and the result is multiplied by 280. What is the final result?





1. **Choice D is correct.** The number 0.06 is the same as six-hundredths, which when written as a fraction is  $\frac{6}{100}$ . Choice A is incorrect because  $\frac{1}{6}$  is equivalent to one-sixth, or  $0.1\overline{6}$ . Choice B is incorrect because  $\frac{1}{60}$  is equivalent to one-sixtieth, or  $0.01\overline{6}$ . Choice C is incorrect because  $\frac{6}{10}$  is equivalent to six-tenths, or 0.6.
2. **Choice D is correct.** To find the total number of items, multiply the total number of members by the number of items each member will donate. This is represented by  $36 \times 12 = 432$ . Choice A is incorrect because this results from adding instead of multiplying. Choice B is incorrect because a multiplication error was made. This results from not using a placeholder zero or writing the numbers starting in the tens place when multiplying the second digit. Choice C is incorrect because a multiplication error was made. This results from making an error when carrying from the ones digit to the tens digit.
3. **Choice A is correct.** The expression  $\frac{4}{10} + \frac{3}{100}$  can be rewritten as  $\frac{40}{100} + \frac{3}{100} = \frac{43}{100}$ .

7. **Choice C is correct.** To find 25% of \$130.00, multiply \$130.00 by 0.25, which is \$32.50. Choice A is incorrect because \$5.20 is 4% of \$130, which results from dividing \$130.00 by 25. Choice B is incorrect because \$25.00 is approximately 19% of \$130, which may be the result of misunderstanding 25% to be \$25. Choice D is incorrect because \$97.50 is 75% of \$130, which is not the amount that will go into the savings account.
8. **Choice D is correct.**  $1,582 + 761 = 2,343$ . Choices A, B, and C are incorrect. Choice A results from adding and carrying from left to right instead of right to left. Choice B is incorrect because no numbers are carried to the next place value. Choice C is incorrect because the 1 from the hundreds place is not carried to the thousands place.
9. **Choice B is c**

14.



19. Choice C is correct. The fraction  $\frac{5}{8}$  is greater than  $\frac{6}{10}$ . When using a common denominator, this statement is equivalent to  $\frac{25}{40} > \frac{24}{40}$