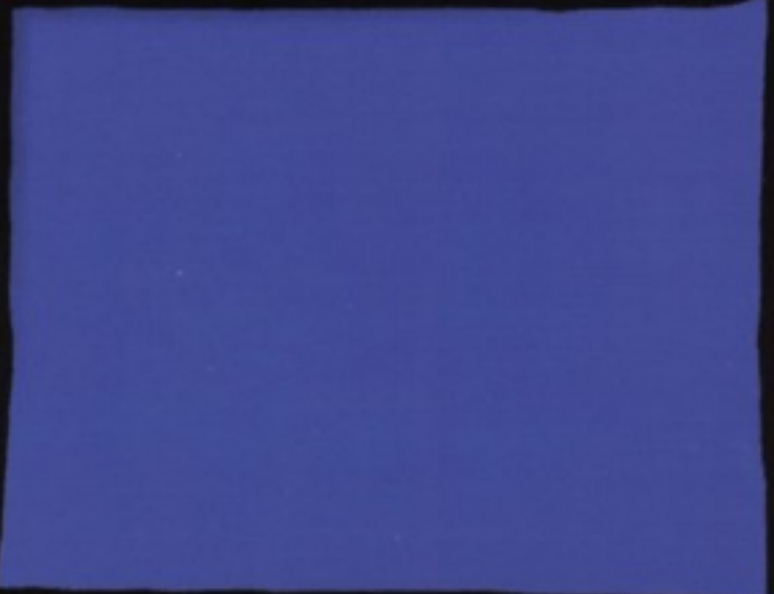


STECK-VAUGHN



Stanford
Tenth Edition





DIRECTIONS ►

Read each question or problem carefully. Then answer the question or work the problem. Mark the space for your answer.

SAMPLE A

What is the value of the 5 in 26,853?

- 5 50 500 5000
A **B** **C** **D**

SAMPLE B



What fraction of the marbles are red?

- $\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{3}$ $\frac{3}{4}$
A **B** **C** **D**

1

FUEL HERE

1 7 5 9

A gallon of gasoline is priced at \$1.759. What is the place value of the digit 9?

- A** Thousandths
B Hundredths
C Tenths
D Ones

2

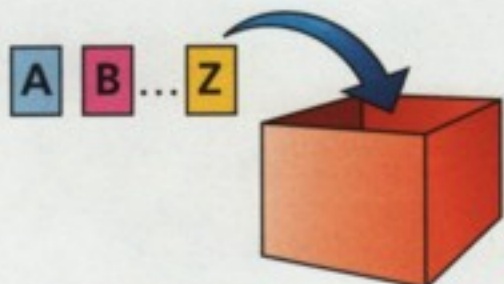
At the football game, 7 girls and 9 boys sold food. Each student was paid \$8. Which expression represents the total amount of money paid to the students?

- A** $\$8 \times (7 + 9)$
B $(\$8 \times 7) + 9$
C $\$8 \times 7 + 9$
D $\$8 \times 7 \times 9$



36

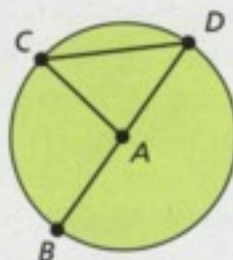
Cheyenne writes each of the 26 letters of the alphabet on a different slip of paper. Then she places the slips in a box.



If Cheyenne randomly selects one slip of paper, how many possibilities are there for her to select a letter in the word MISSISSIPPI?

- A 4
- B 11
- C 15
- D 26

37



Which line segments are chords in circle A?

- A \overline{BD} and \overline{CD}
- B \overline{AC} and \overline{AD}
- C \overline{AB} and \overline{AD}
- D \overline{BD} and \overline{AD}

38



What type of angle does the partly opened door form with the wall on the right?

- A Acute
- B Obtuse
- C Right
- D Straight

Number Sense and Operations

Represent Numbers

A number can be represented as a fraction, decimal, or a percent. The table shows how to convert from one form of a number to another.

Write a Fraction as a Decimal	Write a Fraction as a Percent
Divide the numerator by the denominator. Write $\frac{4}{5}$ as a decimal. $\frac{4}{5} = 4 \div 5 = 0.8$	Convert the fraction to a decimal. Multiply the decimal by 100. Write $\frac{4}{5}$ as a percent. $\frac{4}{5} = 0.8 \cdot 80\%$
Write a Decimal as a Fraction	Write a Decimal as a Percent
Write the decimal as a fraction with 1 as the denominator. Multiply to remove decimal point. Simplify. $0.06 = \frac{0.06}{1} = \frac{0.06 \times 100}{1 \times 100} = \frac{6}{100} = \frac{3}{50}$	Multiply the decimal by 100. Write 0.06 as a percent. $0.06 \times 100 = 6 = 6\%$
Write a Percent as a Fraction	Write a Percent as a Decimal
Write a fraction. Use the digits in the percent as the numerator and use 100 as the denominator. Simplify. Write 65% as a fraction. $65\% = \frac{65}{100} = \frac{13}{20}$	Divide the percent by 100. $65\% = 65 \div 100 = 0.65$

Remember

A number or expression can always be multiplied or divided by 1 without changing its value.

Remember

Always check the simplified fraction to see if it will simplify further. If the numerator and denominator have no common factors, the fraction is in lowest terms.

Example

Write 0.405 as a fraction in lowest terms.

Express 0.405 as a fraction. The numerator is 405. The denominator is 1000: $\frac{405}{1000}$.

Reduce the fraction: $\frac{405}{1000} \div \frac{5}{5} = \frac{81}{200}$.

This fraction is in lowest terms because 81 and 200 have no common factors.

1

Which decimal is equivalent to $\frac{7}{8}$?

- A 0.125
- B 0.875
- C 0.007
- D 0.625

2

Which is the expanded form of 412.027?

- A $400 + 10 + 2 + .0 + .02 + .007$
- B $412 + 1 + .27 + .007$
- C $400 + 10 + .2 + .02 + .007$
- D $4000 + 100 + 20 + .0 + .2 + .07$

3

Four friends were talking about how long they are allowed to watch TV on school nights. Jorge can watch TV for $\frac{7}{12}$ hour. Angela can watch for $\frac{3}{4}$ of an hour. Rudy can watch TV for $\frac{7}{8}$ of an hour, and Maria can watch for $\frac{5}{6}$ of an hour.

Which list shows, from *greatest* to *least*, the four friends according to the amount of time they can watch TV?

- A Jorge, Angela, Rudy, Maria
- B Angela, Jorge, Maria, Rudy
- C Maria, Rudy, Jorge, Angela
- D Rudy, Maria, Angela, Jorge

4

What is 0.428571 rounded to the nearest thousandth?

- A 0.427
- B 0.4285
- C 0.4286
- D 0.429



7

A hardware store sells nails that are $\frac{1}{8}$ foot long, $\frac{1}{16}$ foot long, $\frac{3}{16}$ foot long, and $\frac{1}{4}$ foot long.

What is the length of the *shortest* nail listed?

- $\frac{1}{8}$ ft $\frac{1}{4}$ ft $\frac{3}{16}$ ft $\frac{1}{16}$ ft
A **B** **C** **D**

8

A child's height measures $\frac{27}{12}$ feet.

What is this fraction expressed as a mixed number?

- $2\frac{1}{12}$ $2\frac{1}{4}$ $2\frac{1}{3}$ $2\frac{5}{12}$
A **B** **C** **D**

9

Cholesterol Content of Cheese (One-Ounce Serving)

American Cheese	0.026 g
Cheddar Cheese	0.029 g
Mozzarella Cheese	0.02 g
Cream Cheese	0.03 g

What list is in order from *least* to *greatest*?

- A** 0.02, 0.026, 0.029, 0.03
B 0.02, 0.029, 0.026, 0.03
C 0.03, 0.026, 0.029, 0.02
D 0.03, 0.029, 0.026, 0.02

10



Luke had 7 hits in 25 times at bat. What is his batting average expressed as a decimal?

- A** 0.175
B 0.270
C 0.275
D 0.280