

"6.759 = 7.0"

round up

X

multiply

+

add

=

come to

-

subtract

÷

divide



To: Charles Gordon
 From: Barbara Welch
 Re: Cost of Materials Order

Charles,

You asked why the order was so expensive. We need about two and a half bags of concrete for each structure. I **rounded up** to three bags per structure. There are ten structures. When you **multiply** that, it **equals** thirty bags. That part of the order was \$150. The cost of concrete **plus** the cost of rebar **came to** over \$600. When you **add** shipping costs, it **totals** \$650.

I can **subtract** a few items to save money. The total **minus** the cost of rebar is around \$175. Or, we can make several payments. The bill **divided by** three payments is about \$215. We could pay the **remainder** with the last payment. Let me know what you prefer.

Barbara

Reading

2 Read the email about the cost of materials. Then, mark the statements as true (T) or false (F).

- 1 ☐ The company is working on thirty structures.
- 2 ☐ The cost of rebar was more expensive than the cost of concrete.
- 3 ☐ Shipping costs were about \$175.

Vocabulary

3 Match the words (1-5) with the definitions (A-E).

- | | |
|-------------------------------------|-------------------------------------|
| 1 <input type="checkbox"/> subtract | 4 <input type="checkbox"/> round up |
| 2 <input type="checkbox"/> multiply | 5 <input type="checkbox"/> divide |
| 3 <input type="checkbox"/> add | |

- A to increase a number to a greater whole number, often ending in zero
- B to split a number into equal amounts
- C to take one number away from another
- D to combine two or more numbers
- E to add one number to itself a specific number of times

Get ready!

1 Before you read the passage, talk about these questions.

- 1 What calculations increase a total number?
- 2 What calculations decrease a total number?

$$\frac{7}{8}$$

numerator

$$\frac{7}{8}$$

denominator

75%

percent

$$\frac{2}{3}$$

fraction

0.26

decimal

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

mixed number

The Construction Assistant:

Converting Decimals, Fractions, and Percents

- Reducing Fractions:** Divide the **numerator** and **denominator** by the same number. Repeat if necessary until both cannot be divided into **whole numbers**.
- Percentages:** A **percent** is a fraction. Its denominator is 100. So 71% is equal to 71/100. In **decimal** form, this is 0.71. It is usually easier to do calculations with decimals instead of **fractions**. Convert measurements that are fractions to decimal form.
- Convert** a fraction to a decimal: Divide the numerator by the denominator.
- Convert a **mixed number** to a decimal: First, write the whole number. Place a decimal point to its right. Change the fraction to a decimal (see above). Then write it to the right of the decimal point.

Get ready!

- Before you read the passage, talk about these questions.
 - What are some ways of showing numbers that are not whole?
 - What is $\frac{1}{2}$ displayed as a percent?

Reading

- Read the guide about converting fractions, decimals, and percents. Then, mark the statements as true (T) or false (F).
 - Divide the numerator and the denominator to reduce a fraction.
 - The denominator of any percent is 100.
 - Divide the denominator by the numerator to convert a fraction to a decimal.

Vocabulary

- Match the words (1-5) with the definitions (A-E).

- | | |
|---------------|------------------|
| 1 — numerator | 4 — whole number |
| 2 — fraction | 5 — denominator |
| 3 — percent | |

- a number that is not divided into parts
- the lower number of a fraction
- a ratio of two numbers, expressed with one number written above the other
- the upper number of a fraction
- a number that expresses a part of something per hundred

- Fill in the blanks with the correct words and phrases from the word bank.

word BANK

decimal convert percentage
reduce mixed number

- The expression $12\frac{2}{3}$ is a _____.
- _____ that fraction to its simplest terms.
- What _____ of the insulation is installed?
- Please _____ that fraction to a decimal.
- _____ numbers are usually more accurate than fractions.