

Block 2 ~ Multiplying and Dividing Decimals

School Party

For use after Lesson 2.4

Name _____ Period _____ Date _____

The students at Alejo Middle School are organizing a whole school pizza party. There are 756 students in the middle school. Use the information below to help the students plan their party. Determine how many pizzas of each type should be ordered and how many cases of each beverage should be ordered. Determine the total cost for the pizza and beverages. Use mathematics to justify the order.

- The students have a maximum of \$900 to spend.
- It is assumed that all students will attend the party
- At least 270 of each type of beverage must be ordered.
- The students must order at least 350 slices of each type of pizza.
- Items are sold in the given quantities. Students can purchase multiples of each item, but they cannot split an item to purchase a portion.

Beverages	Cost
Soda pop	\$4.75 for case of 20
Water bottles	\$2.60 for case of 24
Juice boxes	\$3.24 for case of 10

Pizzas	Cost
Cheese	\$4.99 for medium – 10 slices
Pepperoni	\$7.50 for large – 12 slices
Hawaiian	\$9.25 for large – 12 slices

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Flooring

For use after Lesson 2.6

Name _____ Period _____ Date _____

When designing a 600 square meter house, the contractor decides to do the following:

- He will use tile for 0.2 of the total floor area.
- He will use carpet for 0.5 of the total floor area.
- The rest of the total floor area will be wood flooring.

1. How many square meters of flooring material will the contractor need of...

- a. tile?
- b. carpet?
- c. wood flooring?

2. Two companies bid for flooring contracts.

Company A:

- Tile costs \$27.25 per square meter, plus \$15.75 per square meter for installation.
- Carpet costs \$18.50 per square meter, plus \$2.20 per square meter for installation.
- Wood flooring costs \$32 per square meter, plus \$10.80 per square meter for installation.

Company B:

- Tile costs \$28.00 per square meter, plus \$3,300 for installation.
- Carpet cost \$17.05 per square meter, plus \$750 for installation.
- Wood flooring costs \$28.50 per square meter, plus \$900 for installation.

If the contractor wants to choose the company that will give him the best price overall (lowest bid), which company should he choose? Show all work necessary to justify your answer.