

Lesson 11: Fraction Multiplication and the Products of Decimals

Classwork

Exploratory Challenge

You will not only solve each problem, but your groups will also need to prove to the class that the decimal in the product is located in the correct place. As a group, you will be expected to present your informal proof to the class.

1. Calculate the product: 34.62×12.8 .
2. Xavier earns \$11.50 per hour working at the nearby grocery store. Last week, Xavier worked for 13.5 hours. How much money did Xavier earn last week? Remember to round to the nearest penny.

Discussion

Record notes from the discussion in the box below.

Exercises 1–4

1. Calculate the product: 324.56×54.82 .
2. Kevin spends \$11.25 on lunch every week during the school year. If there are 35.5 weeks during the school year, how much does Kevin spend on lunch over the entire school year? Remember to round to the nearest penny.
3. Gunnar's car gets 22.4 miles per gallon, and his gas tank can hold 17.82 gallons of gas. How many miles can Gunnar travel if he uses all of the gas in the gas tank?
4. The principal of East High School wants to buy a new cover for the sand pit used in the long jump competition. He measured the sand pit and found that the length is 29.2 feet and the width is 9.8 feet. What will the area of the new cover be?

Problem Set

Solve each problem. Remember to round to the nearest penny when necessary.

1. Calculate the product: 45.67×32.58 .
2. Deprina buys a large cup of coffee for \$4.70 on her way to work every day. If there are 24 work days in the month, how much does Deprina spend on coffee throughout the entire month?
3. Krego earns \$2,456.75 every month. He also earns an extra \$4.75 every time he sells a new gym membership. Last month, Krego sold 32 new gym memberships. How much money did Krego earn last month?
4. Kendra just bought a new house and needs to buy new sod for her backyard. If the dimensions of her yard are 24.6 feet by 14.8 feet, what is the area of her yard?