

## Lesson 14: The Division Algorithm—Converting Decimal Division into Whole Number Division Using Fractions

### Classwork

#### Example 1

Divide:  $31,218 \div 132$ .

#### Example 2

Divide:  $974.835 \div 12.45$ .

**Example 3**

A plane travels 3,625.26 miles in 6.9 hours. What is the plane's unit rate?

**Exercises 1–7**

Estimate the quotient first. Use the estimate to justify the reasonableness of your answer.

1. Daryl spent \$4.68 on each pound of trail mix. He spent a total of \$14.04. How many pounds of trail mix did he purchase?
2. Kareem purchased several packs of gum to place in gift baskets for \$1.26 each. He spent a total of \$8.82. How many packs of gum did he buy?

3. Jerod is making candles from beeswax. He has 132.72 ounces of beeswax. If each candle uses 8.4 ounces of beeswax, how many candles can he make? Will there be any wax left over?
4. There are 20.5 cups of batter in the bowl. If each cupcake uses 0.4 cups of batter, how many cupcakes can be made?
5. In Exercises 3 and 4, how were the remainders, or extra parts, interpreted?

6.  $159.12 \div 6.8$

7.  $167.67 \div 8.1$

**Problem Set**

1. Asian purchased 3.5 lb. of his favorite mixture of dried fruits to use in a trail mix. The total cost was \$16.87. How much did the fruit cost per pound?
2. Divide:  $994.14 \div 18.9$ .