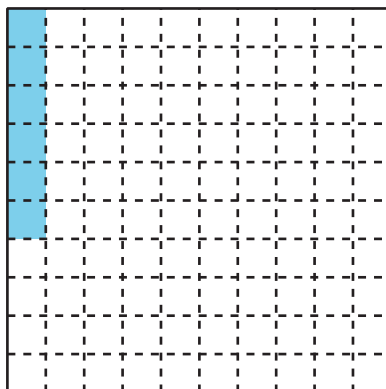# Lesson 1: Decimal Numbers

- Let's learn about decimals.

Warm-up: Notice and Wonder: Shaded Grid
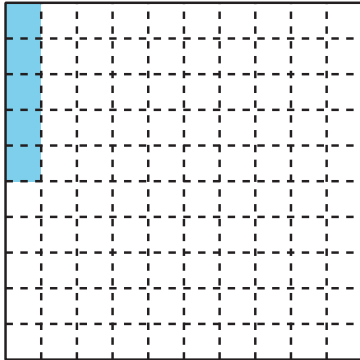
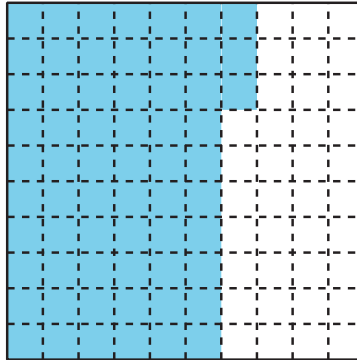What do you notice? What do you wonder?

1.1: Shady Fractions

Each large square represents 1.

1. What fraction do the shaded parts of each diagram represent? For the last square, shade in some parts and name the fraction it represents.
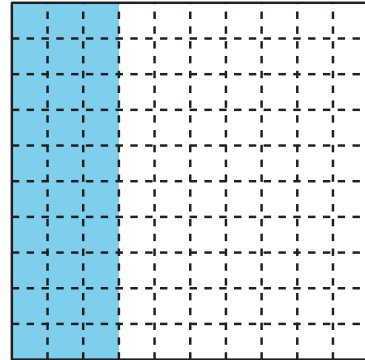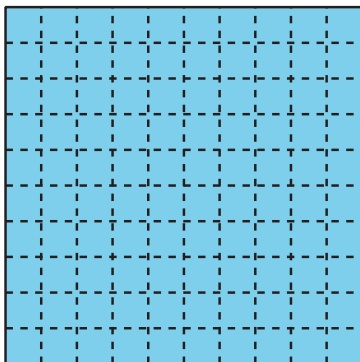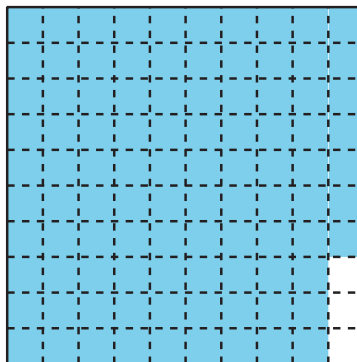
a.

b.

c.

d.

e.

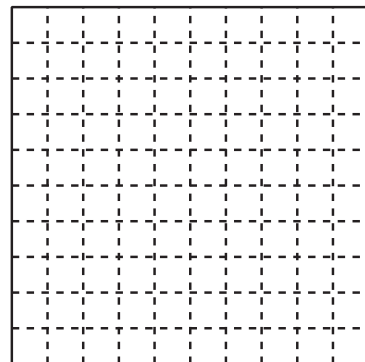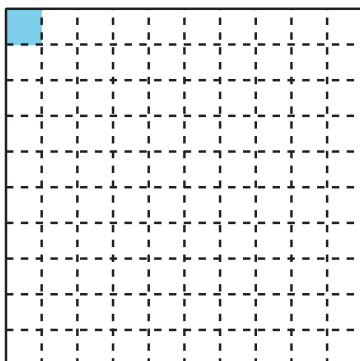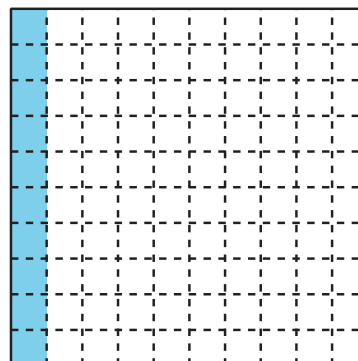**f.**

2. The shaded part of this diagram represents 0.01 or "1 hundredth."

The shaded parts of this diagram represent 0.10 or "10 hundredths." They also represent 0.1 or "1 tenth."
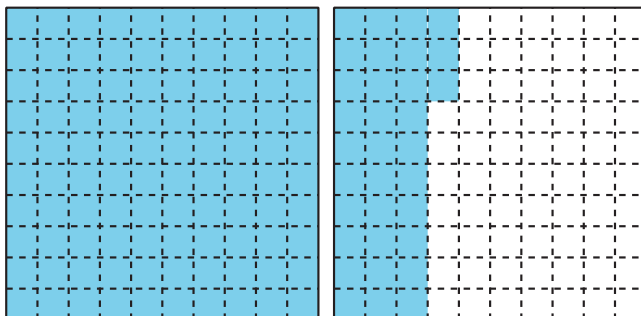

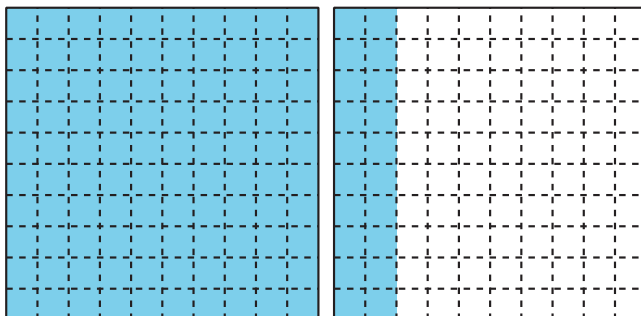Numbers like 0.01, 0.10, and 0.1 are written as **decimals**.

Look at the shaded parts of each diagram in the first problem. Write the numbers they represent as decimals.

3. What fraction and decimal do the shaded parts of each diagram represent?
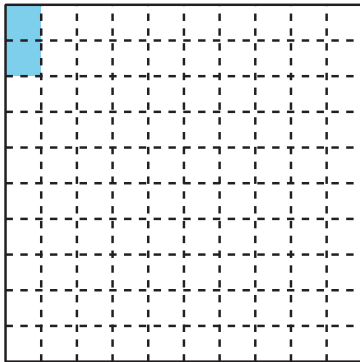
   a.

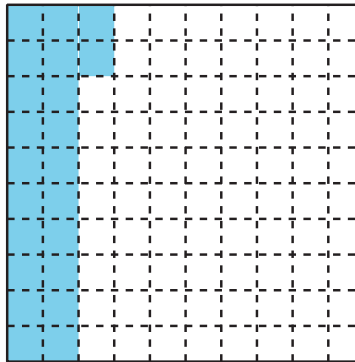   **b.**

1.2: Ways to Express a Number

Each large square represents 1.

1. Write a fraction and a decimal that represent the shaded parts of each diagram.
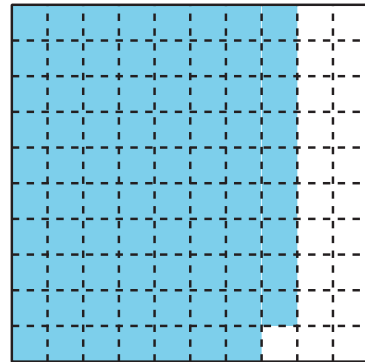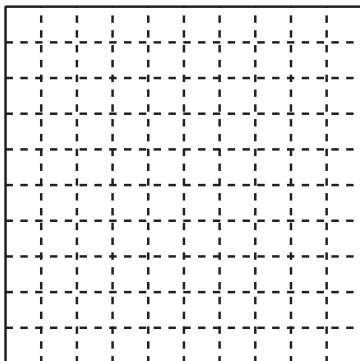   Then, write each amount in words.

   a.   **b.**   **c.**

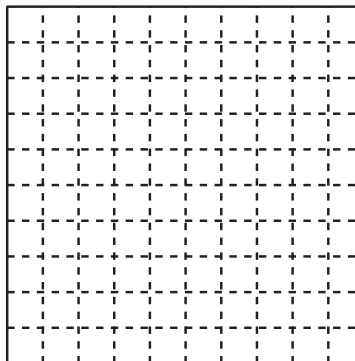2. Shade each diagram to represent each given fraction or decimal.

   a.   **b.**   **c.**
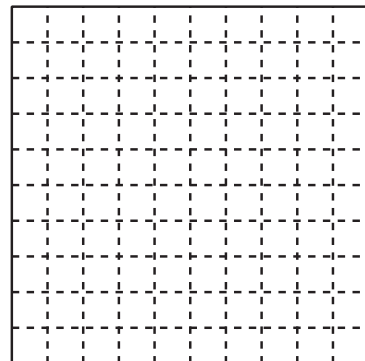
   Fraction: _____   Fraction: $\frac{8}{10}$ Fraction: $\frac{55}{100}$

   Decimal: 0.78   Decimal: _____   Decimal: _____
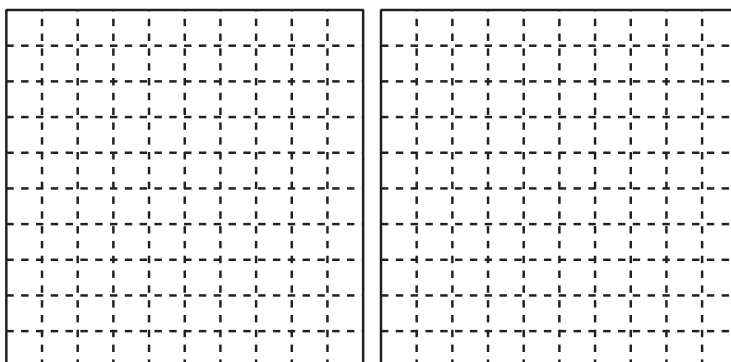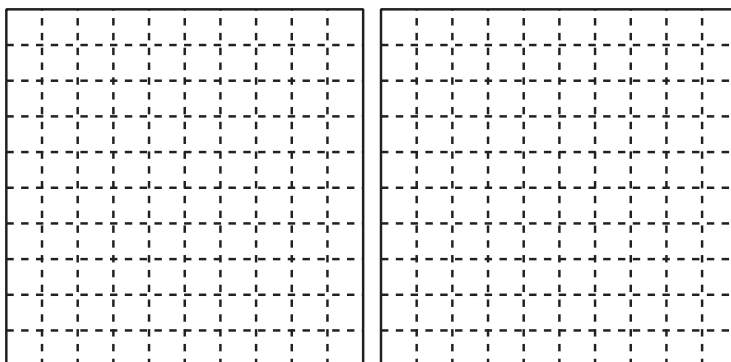
d.

Fraction: $\frac{107}{100}$

Decimal: _____

e.

Fraction: _____

Decimal: 1.6

3. Han and Elena disagree about what number the shaded portion represents.

   Han says that it represents 0.60 and Elena says it represents 0.6.

   Explain why both Han and Elena are correct.

_____

_____

_____

_____