Unit 4, Lesson 1

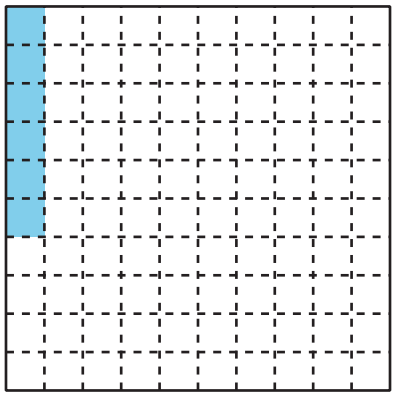
Decimal Numbers

Let's learn about decimals.

Warm-up

Notice and Wonder: Shaded Grid

What do you notice? What do you wonder?



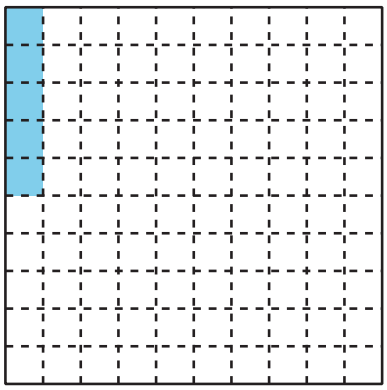
Activity 1

Shady Fractions

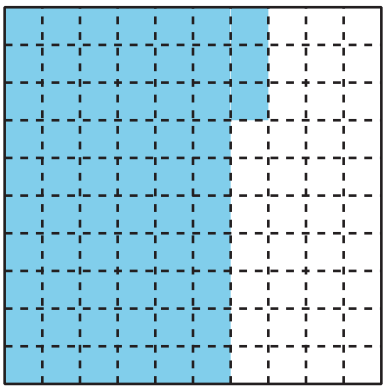
Each large square represents 1.

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.

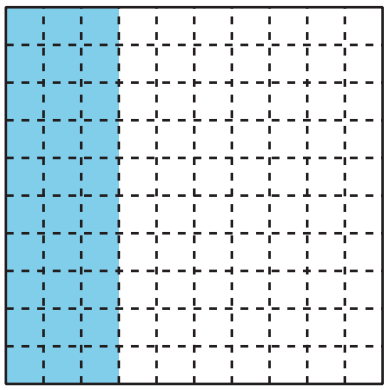
a.



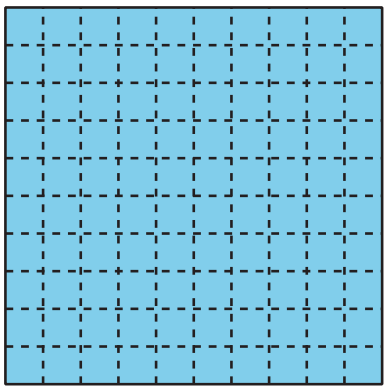
b.



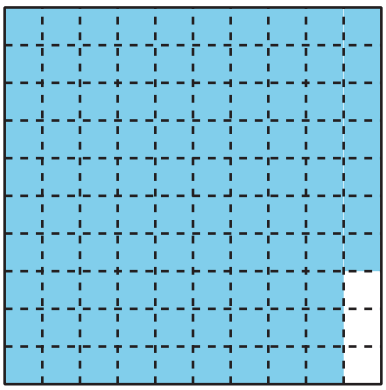
c.



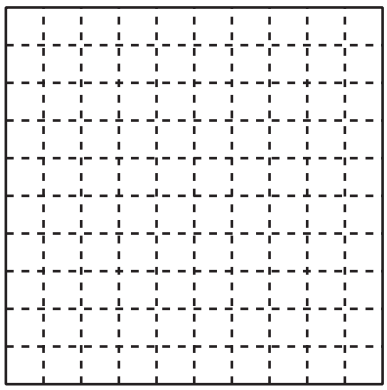
d.



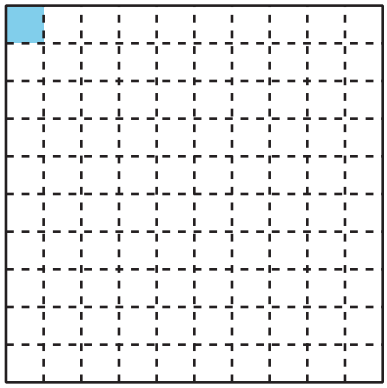
e.



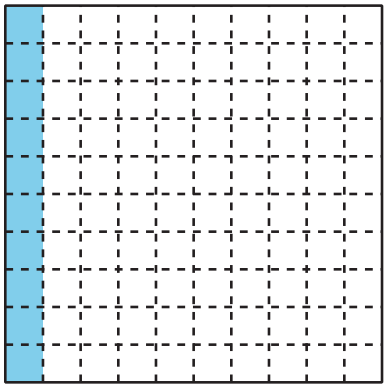
f.



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.”

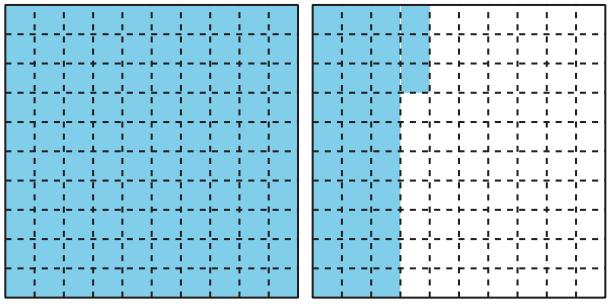


Numbers like 0.01, 0.10, and 0.1 are written in **decimal notation**.

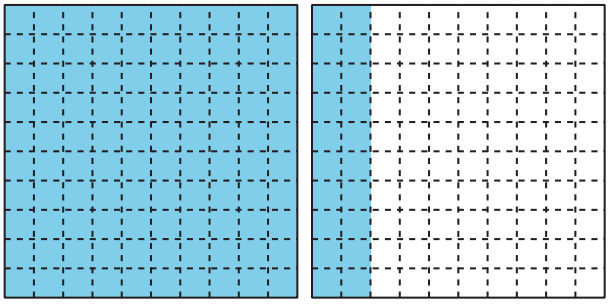
Look at the shaded parts of each diagram in the first problem. Write the numbers they represent in decimal notation.

3. What number does the shaded parts of each diagram represent? Write the number as a fraction and in decimal notation.

a.



b.



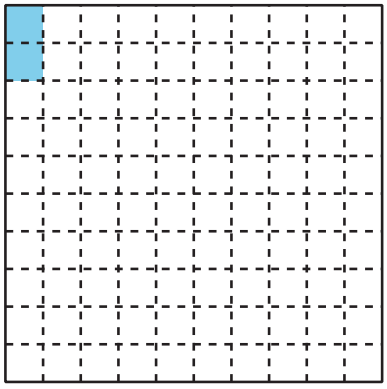
Activity 2

Ways to Express a Number

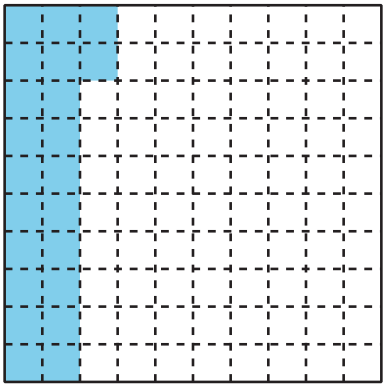
Each large square represents 1.

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

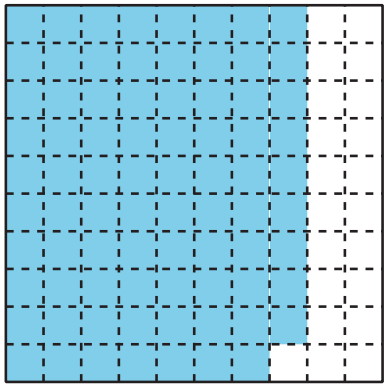
a.



b.

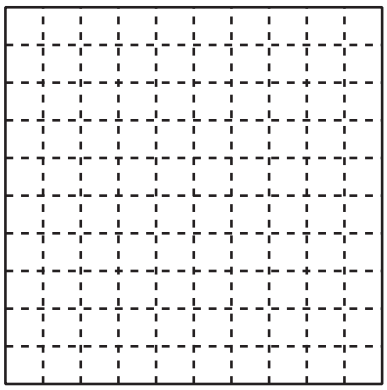


c.



2. Shade each diagram to represent the given number. Then write the number in the form that is not given.

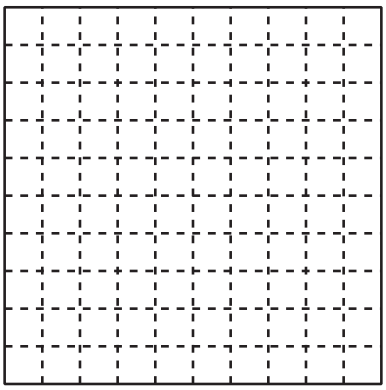
a.



Fraction: _____

Decimal Notation: 0.78

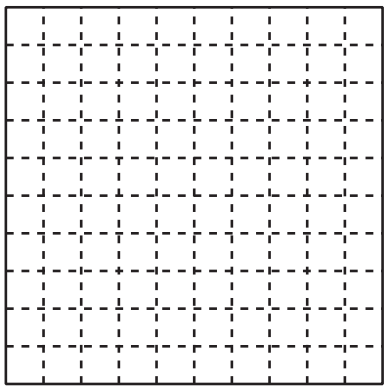
b.



Fraction: $\frac{8}{10}$

Decimal Notation: _____

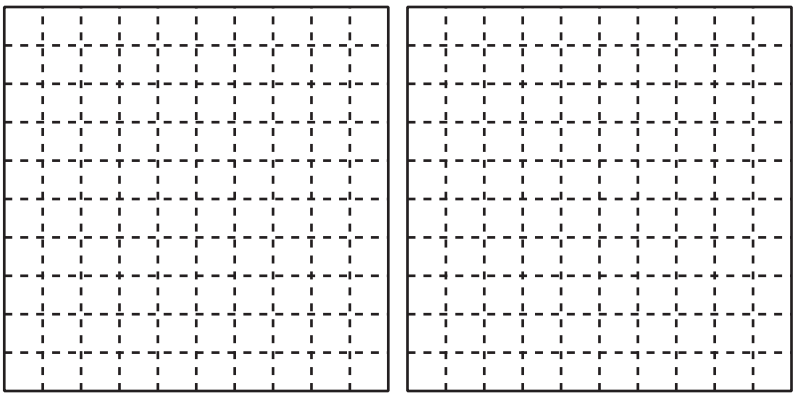
c.



Fraction: $\frac{55}{100}$

Decimal Notation: _____

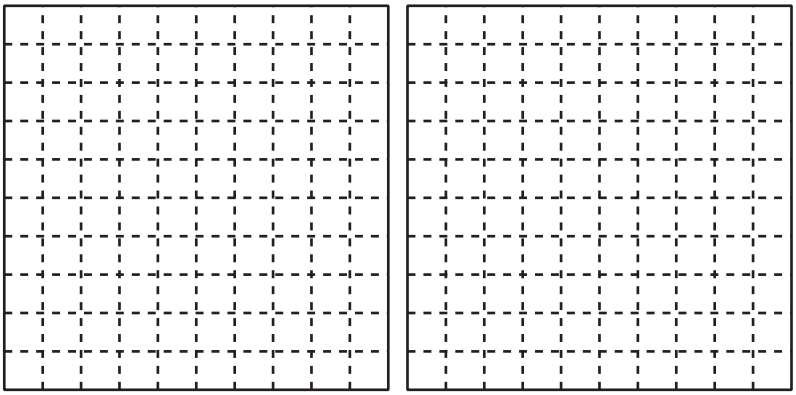
d.



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

Decimal Notation: _____

e.



Fraction: _____

Decimal Notation: 1.6

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

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

   Explain why both Han and Elena are correct.