NAME:

M a t h
PATHWAYS&PITFALLS

Purpose

To find exact or approximate decimal equivalents for fractions

Math Words

approximately equal to	Ninety-nine hundredths is approximately equal to 1. We write: 0.99 ≈ 1.
approximate	When an amount is close to the exact amount, it is approximate.
repeats	A digit (or digits) in a decimal that repeats forever has a bar drawn over it. 0.111 . . . = 0.$\overline{1}$.

Starter Problem

Grandfather called to say that it rained 0.28 of an inch on his farm. My dad says it rained about $\frac{1}{3}$ of an inch in town. Approximately how many hundredths is $\frac{1}{3}$?

$$\frac{1}{3} \approx \underline{\hspace{2cm}}$$

NAME:

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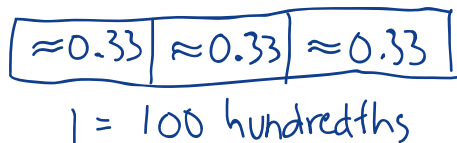
$$\frac{1}{3} \approx \underline{\hspace{3cm}}$$

Student Thinking

Bobby

I drew a rectangle to show 100 hundredths. Each third is 33 hundredths with 1 hundredth left over. I wrote ≈ 0.33 on each part because $\frac{1}{3}$ is a little bit more than 33 hundredths.

OK

| ≈0.33 | ≈0.33 | ≈0.33 |

1 = 100 hundredths

$$\frac{1}{3} \approx \underline{0.33}$$

Caitlin

I just made $\frac{1}{3}$ into hundredths by changing the fraction bar into a decimal point. It's .13.

Pitfall

$$\frac{1}{3} \approx \underline{.13}$$

Things to Remember

✱ ....

....

✱ ....

....

STOP

NAME:

Our Turn

Write a decimal in hundredths or thousandths that is equal or approximately equal to the given fraction. Draw a picture to help you figure it out.

1. $\frac{3}{4}$ = 0.___ ___

2. $\frac{5}{6}$ ≈ 0.___ ___ ___

3. $\frac{3}{8}$ = 0.___ ___ ___

NAME:

My Turn

Write a decimal in hundredths or thousandths that is equal or approximately equal to the given fraction. Draw a picture to help you figure it out.

1. $\frac{2}{9} \approx 0.$ ___ ___

2. $\frac{3}{10} = 0.$ ___ ___

3. $\frac{1}{6} \approx 0.$ ___ ___ ___

NAME:

Multiple Choice Mini Lesson

Fill in the circle next to the answer you choose.

1. $\frac{1}{8}$ is equal to _____

   ○ 0.018   ○ 1.8   ○ 0.25   ○ 0.125

2. $\frac{1}{9}$ is approximately equal to _____

   ○ 1.9   ○ 0.11   ○ 0.19   ○ 0.9

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Writing Task Mini Lesson

Explain how you know that $\frac{2}{3}$ is approximately equal to 0.66. You may draw a picture on the back to help you explain.