$6 \div \frac{1}{2}$

$\frac{6}{1} \cdot \frac{2}{1} = \frac{12}{1}$

12

$2 \div \frac{1}{4}$

$\frac{2}{1} \cdot \frac{4}{1} = \frac{8}{1}$

8

$5 \div \frac{1}{3}$

$\frac{5}{1} \cdot \frac{3}{1} = \frac{15}{1}$

15

Hopping on the Number Line

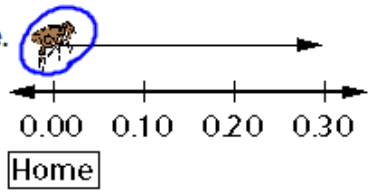
Lesson 3-2

DATE TIME

Math Message

Fido the flea is hopping along a number line to explore new destinations. Fido always starts at 0 (Home) and faces in the positive direction. Fido is at 0 (Home) on the number line.

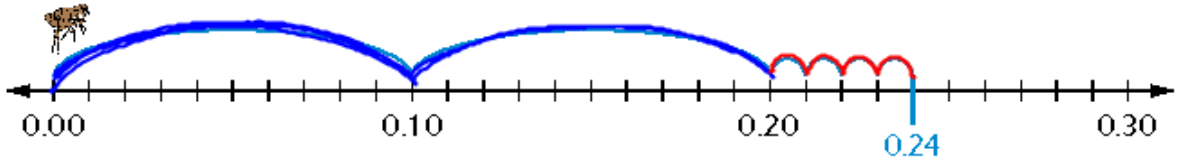
1. Fido is heading for the Flea Flag shop at 0.24 on the number line. Three possible hop combinations to get there:



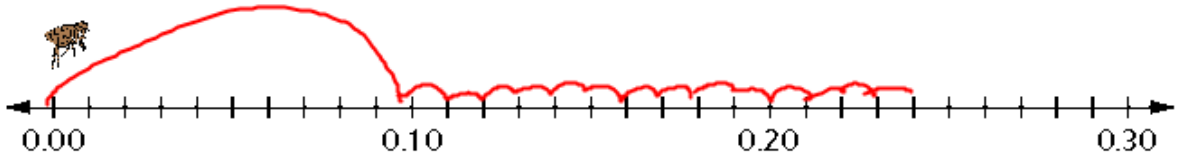
Hop Set 1: 2 hops 0.10 long, then 4 hops 0.01 long
Hop Set 2: 1 hop 0.10 long, then 14 hops 0.01 long
Hop Set 3: 24 hops 0.01 long

Hop Set 1 is drawn for you. Draw the other two on the number lines below.

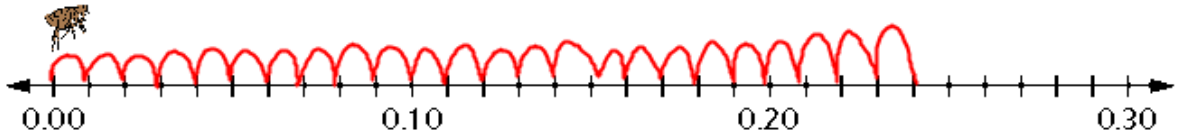
Hop Set 1:



Hop Set 2:



Hop Set 3:



2. Write a number sentence to represent each hop set. The first one is done for you.

Hop Set 1: $(2 * 0.1) + (4 * 0.01) = 0.24$

Hop Set 2: $(1 \cdot .1) + (14 \cdot .01) = .24$

Hop Set 3: $(24 \cdot .01) = .24$

3. Describe how the three hop sets are similar and how they differ.

Hopping on the Number Line (continued)

Lesson 3-2

DATE TIME

4. Fido goes to his friend Flip's house to show him what he bought at the Flea Flag shop. The lengths of Fido's hops are always 1 tenth, 1 hundredth, or 1 thousandth.

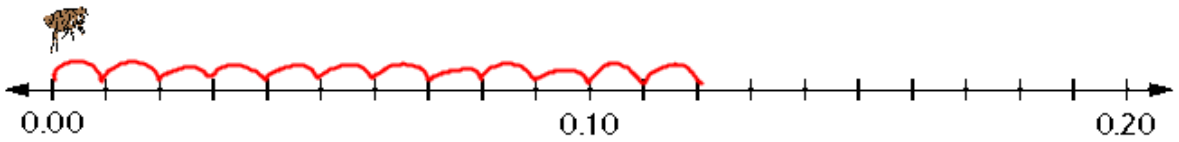
   Fido starts at 0. Flip's house is at 0.12.

   Hop Set 1 takes a total of 12 hops to reach 0.12.

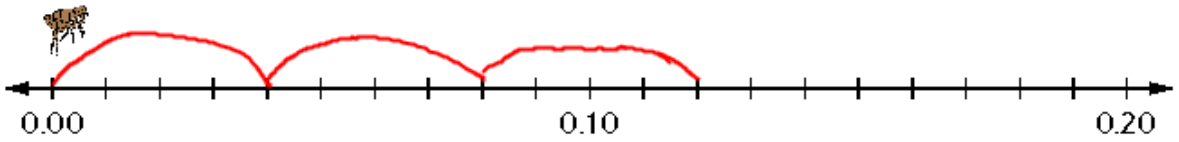
   Hop Set 2 takes a total of 3 hops to reach 0.12.

   Show these two different hop sets on the number lines below.

   Hop Set 1:



   Hop Set 2:



5. Use expanded form or a single product to write a number sentence for each hop set to 0.12.

   Hop Set 1: _____

   Hop Set 2: _____

6. Flip and Fido hear about a new Flea Fun House opening at 0.804 on the number line. Fido uses place value to efficiently hop from 0 to 0.804. He begins with long hops first. Describe Fido's hop set.

   _____

   Number sentence: _____

7. Flip tells Fido that he could make short hops first and then make long hops. Write a number sentence that reverses the hop set you recorded in Problem 6.

   _____

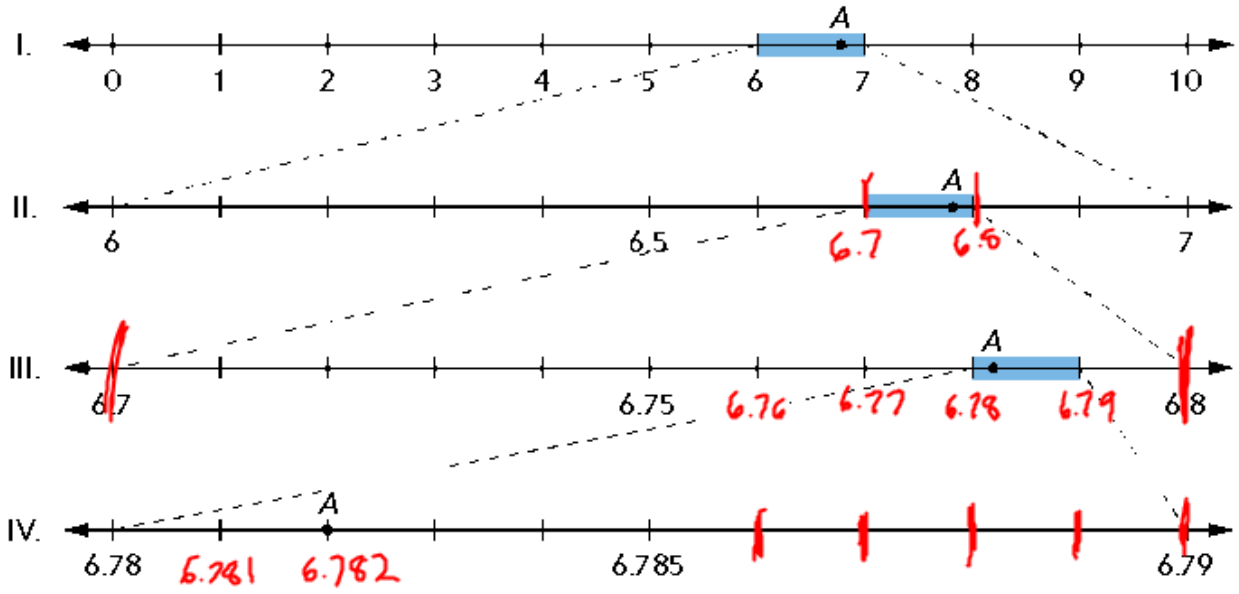
Zooming In on Number Lines

Lesson 3-2

DATE TIME

In Lesson 1-12, you *zoomed in* to find fractions between fractions.
This process is even easier when you want to find decimals between decimals.

1 This series of four number lines *zooms in* on point *A*.



a. Look at each number line separately and estimate where point *A* is located on each.

I. 6.9 II. 6.74

III. 6.782 IV. 6.782

b. How far apart are the tick marks on each number line?

I. _____ II. _____

III. _____ IV. _____

c. Use the number lines to find three numbers between 6.7 and 6.8:

_____ _____ _____

d. Use the number lines to find three numbers between 6.78 and 6.79:

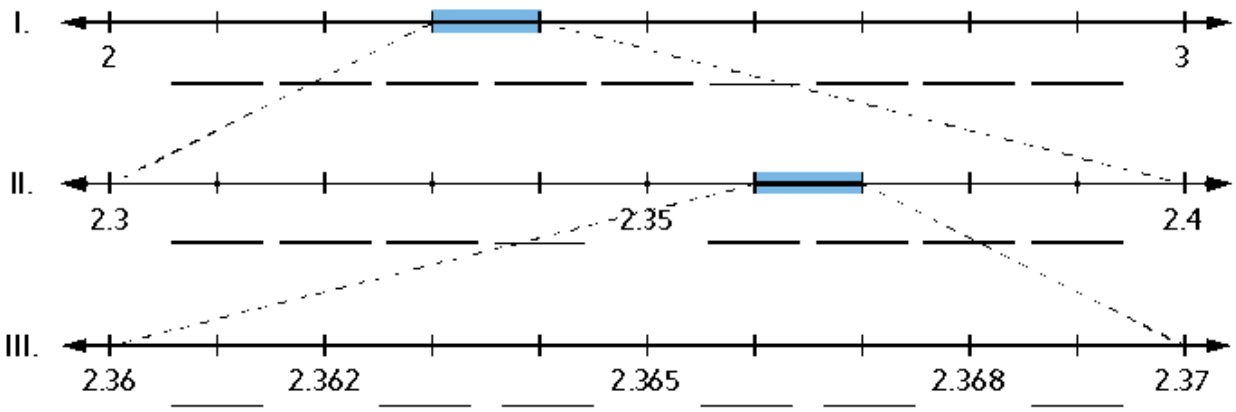
_____ _____ _____

Zooming In on Number Lines (continued)

Lesson 3-2

DATE TIME

2 **a.** Label the missing numbers on the number lines below.



b. Place point *F* at about 2.367 on each number line.

c. Write 2.367 in expanded form as the sum of products with decimals.

_____

d. Write a number greater than 2.367 and less than 2.368.
Hint: Think about what the next number line would look like. _____

e. Explain how the expanded form for your number in Problem 2d would be similar to or different from the expanded form you wrote in Problem 2c.

_____

_____

_____

3 Find three numbers between each of the decimal pairs below.
The number lines from Problem 2a may be helpful.

a. 2.1 and 2.2 _____

b. 2.34 and 2.35 _____

4 Circle the numbers below that are between 2.361 and 2.362.

2.3605 2.36182 2.36175 2.3625 2.3622 2.3615

Fraction Practice

Lesson 3-2

DATE TIME

Solve.

SRB 179, 189, 193

1. **a.** GCF (12, 18) = _____ **b.** Write $\frac{12}{18}$ in simplest form. _____

2. **a.** LCM (12, 18) = _____

   b. Rename $\frac{7}{12}$ and $\frac{5}{18}$ with a common denominator. _____

3. To fill a hummingbird feeder, you mix $\frac{1}{4}$ cup of sugar with 1 cup of water. Zahlia has $3\frac{3}{4}$ cups of sugar. How many hummingbird feeders can she fill? How much water will she need?

   Number sentence: _____

   Solution: _____

4. Holly has $4\frac{1}{2}$ pounds of potting soil. Jasper has $3\frac{2}{3}$ pounds of potting soil.
   They need 9 pounds of potting soil for planting tomatoes.
   How much more do they need?

   Number sentence: _____

   Solution: _____

5. Raymond has 3 pounds of birdseed. He has 5 bird feeders in his yard.
   How much seed can he put in each feeder?

   Number sentence: _____

   Solution: _____

6. **a.** A bag of 12 oranges weighs $4\frac{1}{2}$ pounds.
   If the oranges are about the same size, about how much does each orange weigh?

   Number sentence: _____

   Solution: _____

   b. How much would half an orange weigh?

   Number sentence: _____

   Solution: _____

Math Boxes

Lesson 3-2

DATE TIME

Math Boxes

1 Multiply.

a. $20 * 80 =$ _____

b. $25 * 300 =$ _____

c. _____ $= 1{,}350 * 20$

d. _____ $= 6 * 7{,}400$

SRB 133

2 Jill buys a T-shirt for $12.79 and a pair of socks for $6.75 at the mall.

a. How much does she spend?

Number model: _____

Solution: _____

b. If she pays with a $20.00 bill, how much change will she get?

Number model: _____

Solution: _____

SRB 133-136, 145-148

3 Tell whether or not each expression is the product of two factors.

$8 * 4$	yes	no
$25 * 105 - 37$	yes	no
$(3 + 7) * (4 + 11)$	yes	no
$12 * (38 - 25)$	yes	no

SRB 160

4 Write the reciprocal of each number.

a. 5 _____

b. $\frac{2}{3}$ _____

c. $1\frac{1}{4}$ _____

d. $\frac{7}{6}$ _____

SRB 198

5 Subtract.

$\frac{23}{10} - \frac{1}{5} = ?$

Circle ALL that apply.

A. $\frac{21}{10}$

B. $2\frac{1}{10}$

C. $\frac{22}{5}$

D. $2\frac{1}{5}$

SRB 195

6 To make a certain shade of paint, an artist needs to mix yellow paint with blue paint at a ratio of 3 to 5. He needs 32 ounces of paint.

How much yellow paint should he buy?
Hint: A tape diagram might be helpful.

Solution: _____

SRB 45-48


P13-16