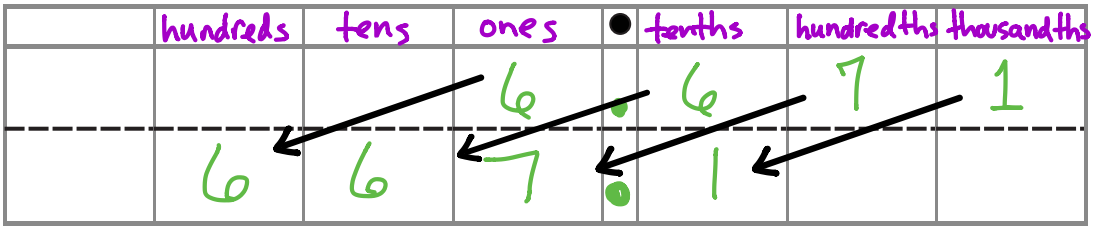
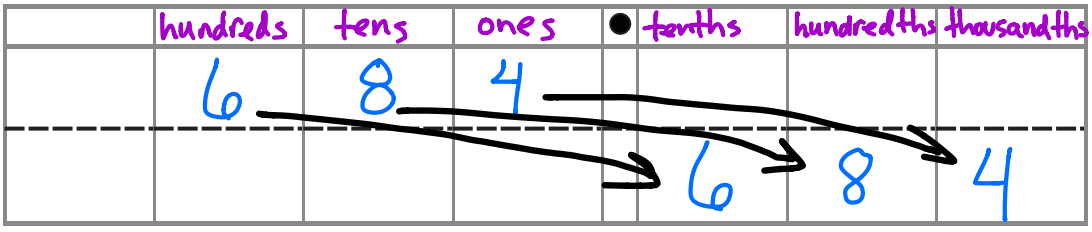
Name _____ Date _____

Use the place value chart and arrows to show how the value of each digit changes.

a. 6.671 × 100 = _____



b. 684 ÷ 1,000 = _____



Name _____ Date _____

1. Solve.

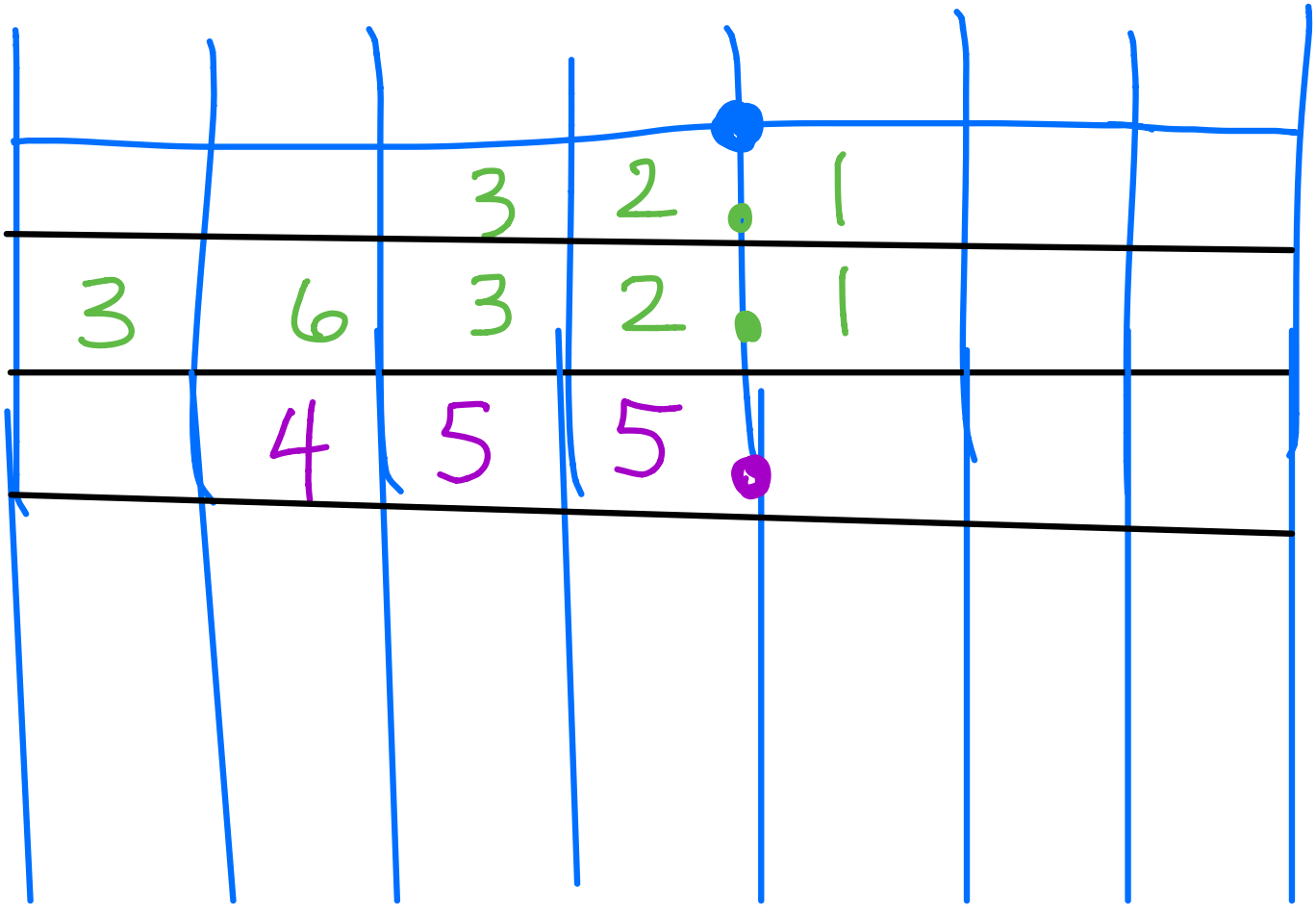
a. 32.1 × 10 = 321

b. 3632.1 ÷ 10 = 363.21

2. Solve.

a. 455 × 1,000 = 455000

b. 455 ÷ 1,000 = 0.455



Name _____ Date _____

1. Write the following in exponential form and as a multiplication sentence using only 10 as a factor (e.g., $100 = 10^2 = 10 \times 10$).

   a. 1,000 = 10^3 = $10 \times 10 \times 10$

   b. 100×100 = 10^4 = $10 \times 10 \times 10 \times 10$

2. Write the following in standard form (e.g., $4 \times 10^2 = 400$).

   a. 3×10^2 = 300
   3×100

   b. 2.16×10^4 = 21600
   2.16×10000

   c. $800 \div 10^3$ = 0.8
   $800 \div 1000$

   d. $754.2 \div 10^2$ = 7.542
   $754.2 \div 100$

Name _____ Date _____

1. Convert using an equation with an exponent.

   a. 2 meters to centimeters 2 m = 200 cm 2×10^2

   b. 40 millimeters to meters 40 mm = 0.04 m $40 \div 10^3$

2. Read each aloud as you write the equivalent measures.

   a. A piece of fabric measures 3.9 meters. Express this length in centimeters.

   3.9 m = 390 cm $3.9 \times 100 = 390$

   b. Ms. Ramos's thumb measures 4 centimeters. Express this length in meters.

   4 cm = 0.04 m $4 \div 100 = 0.04$

Name _____ Date _____

1. Express nine thousandths as a decimal.

0.009

2. Express twenty-nine thousandths as a fraction.

$\frac{29}{1000}$

3. Express 24.357 in words. twenty four and three hundred fifty seven thousandths

   a. Write the expanded form using fractions or decimals.

$2 \times 10 + 4 \times 1 + 3 \times \frac{1}{10} + 5 \times \frac{1}{100} + 7 \times \frac{1}{1000}$

$2 \times 10 + 4 \times 1 + 3 \times 0.1 + 5 \times 0.01 + 7 \times 0.001$

   b. Express in unit form.

24 ones 357 thousandths

Name _____ Date _____

1. Show the numbers on the place value chart using digits. Use >, <, or = to compare. Explain your thinking in the space to the right.

167.4 < 167.462

1	6	7	4		
1	6	7	4	6	2

167.4 is the same as 167 and 400 thousandths

167.462 is the same as 167 and 462 thousandths

462 thousandths is greater than 400 thousandths

2. Use >, <, and = to compare the numbers.

32.725 < 32.735

3. Arrange the numbers in decreasing order.

76.342 76.332 76.232 76.343

76.343 76.342 76.332 76.232

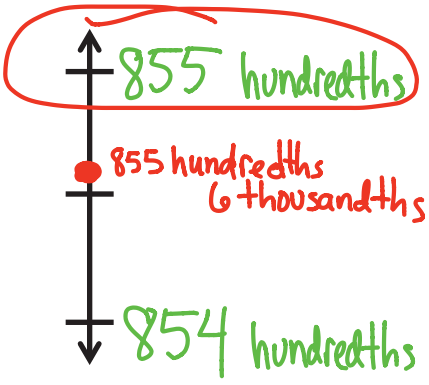
Name _____ Date _____

Use the table to round the number to the given places. Label the number lines, and circle the rounded value.

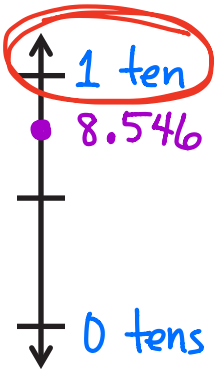
8.546

Tens	Ones	•	Tenths	Hundredths	Thousandths
	8	•	5	4	6
		•	85	4	6
		•		854	6
		•			8546

a. Hundredths



b. Tens

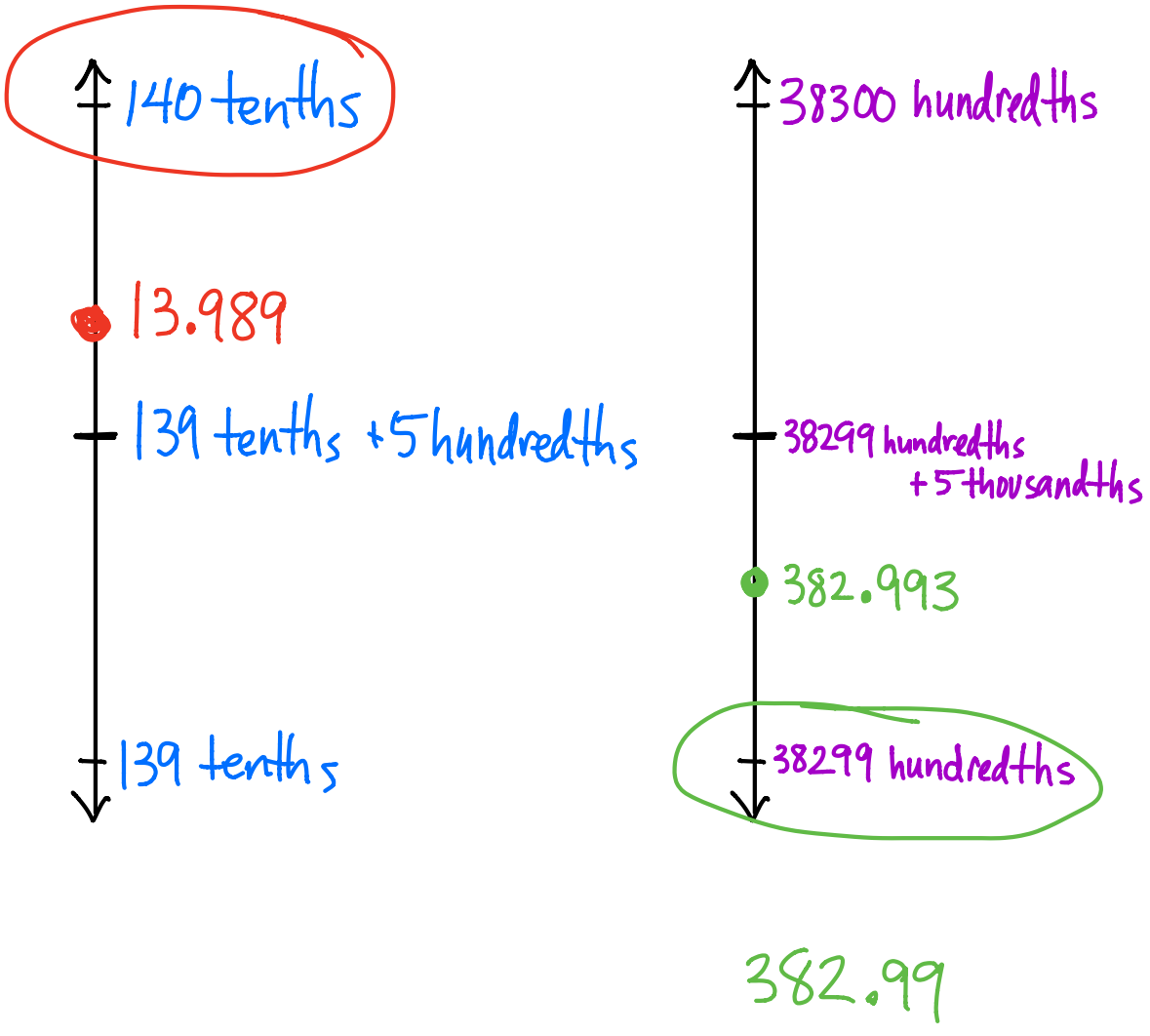


Name _____ Date _____

Round the quantity to the given place value. Draw number lines to explain your thinking. Circle the rounded value on the number line.

a. 13.989 to the nearest tenth → 14

b. 382.993 to nearest hundredth → 382.99



382.99

Name _____ Date _____

1. Solve.

   a. 4 hundredths + 8 hundredths = 12 hundredths = 1 tenth(s) 2 hundredths

   b. 64 hundredths + 8 hundredths = 72 hundredths = 7 tenths 2 hundredths

2. Solve using the standard algorithm.

a. 2.40 + 1.8 = 4.2	b. 36.25 + 8.67 = 44.92
2.40 + 1.8 4.20	36.25 + 8.67 44.92

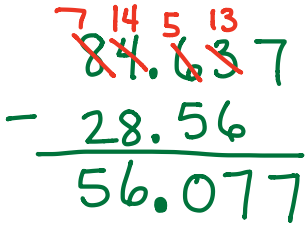
Name _____ Date _____

1. Subtract.

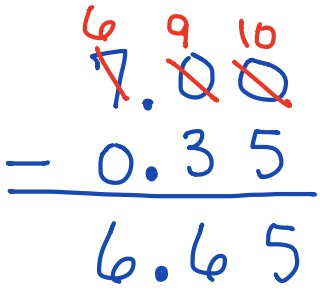
1.7 – 0.8 = 17 tenths – 8 tenths = 9 tenths = 0.9

2. Subtract vertically, showing all work.

a. 84.637 – 28.56 = _____



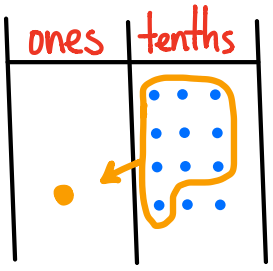
b. 7 – 0.35 = _____



Name _____ Date _____

1. Solve by drawing disks on a place value chart. Write an equation, and express the product in standard form.

4 copies of 3 tenths



$4 \times 0.3 = 4 \times 3 \text{ tenths} = 12 \text{ tenths} = 1.2$

– OR –

$$\begin{array}{r} 0.3 \\ \times \quad 4 \\ \hline 1.2 \end{array}$$

2. Complete the area model, and then find the product.

3 × 9.63

	9 ones	6 tenths	3 hundredths
3	3 × 9 ones	3 × 6 tenths	3 × 3 hundredths
	27 ones +	18 tenths	9 hundredths

28.89

Name _____ Date _____

1. Use estimation to choose the correct value for each expression.

a. 5.1×2	0.102	1.02	10.2	102
≈ 5x2=10				
b. 4×8.93	3.572	35.72	357.2	3572
≈ 4x9=36				

2. Estimate the answer for 7.13×6. Explain your reasoning using words, pictures, or numbers.

7.13 is approximately 7, so 7.13x6 is approximately 7x6=42. So 7.13x6 is about 42.

Name _____ Date _____

1. Complete the sentences with the correct number of units, and then complete the equation.

   a. 2 groups of 9 tenths is 1.8. 1.8 ÷ 2 = 0.9

   b. 4 groups of 8 hundredths is 0.32. 0.32 ÷ 4 = 0.08

   c. 7 groups of 3 thousandths is 0.021. 0.021 ÷ 7 = 0.003

2. Complete the number sentence. Express the quotient in unit form and then in standard form.

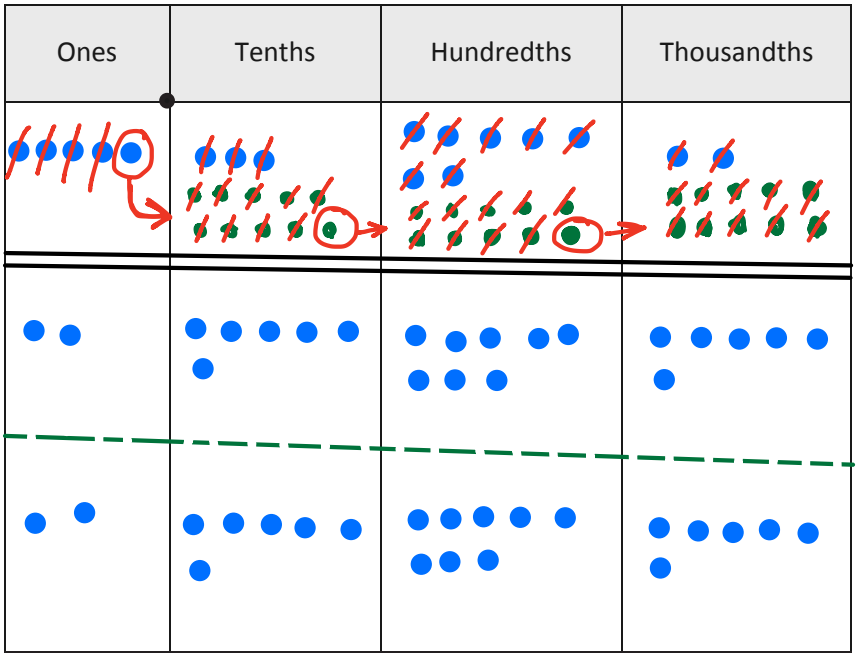
   a. 4.5 ÷ 5 = 45 tenths ÷ 5 = 9 tenths = 0.9

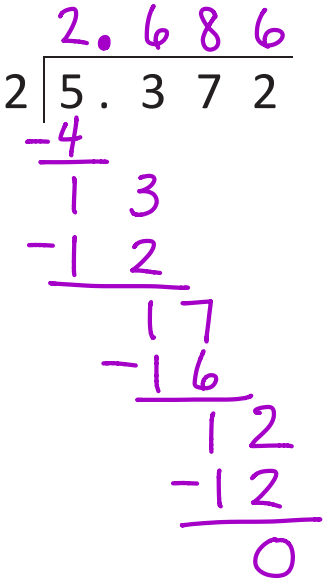
   b. 6.12 ÷ 6 = 6 ones ÷ 6 + 12 hundredths ÷ 6
   = 1 ones + 2 hundredths
   = 1.02

Name _____ Date _____

1. Draw place value disks on the place value chart to solve. Show each step using the standard algorithm.

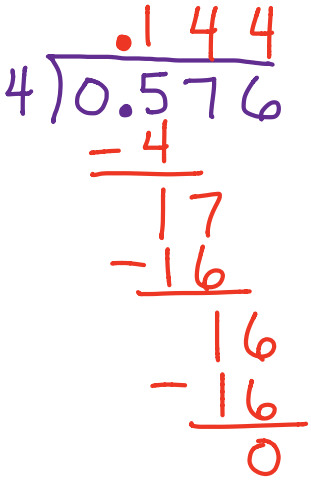
5.372 ÷ 2 = _____

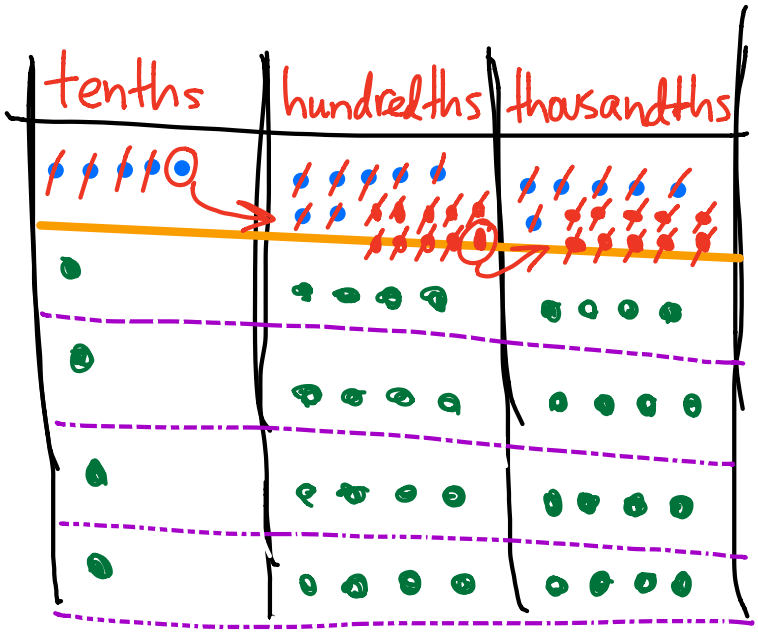




2. Solve using the standard algorithm.

0.576 ÷ 4 = _____

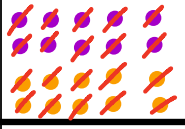
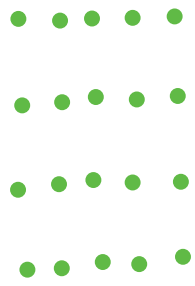


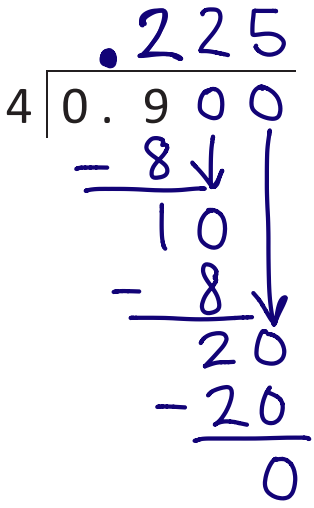


Name _____ Date _____

1. Draw place value disks on the place value chart to solve. Show each step in the standard algorithm.

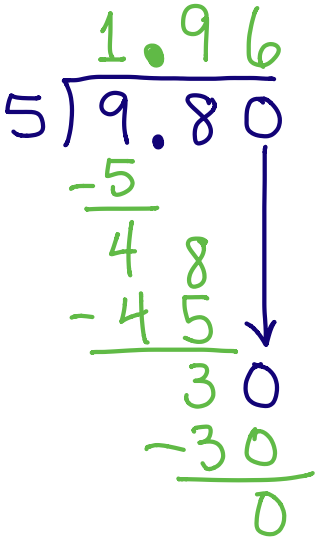
   0.9 ÷ 4 = _____

Ones	•	Tenths	Hundredths	Thousandths
				
				



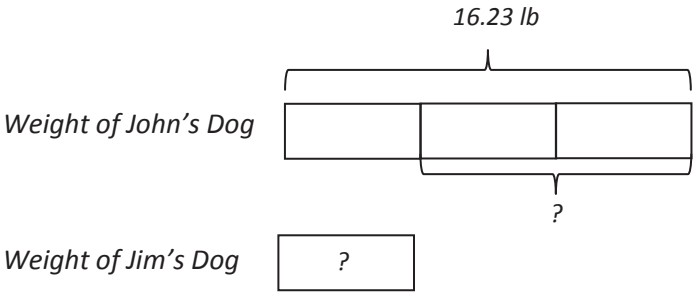
2. Solve using the standard algorithm.

   9.8 ÷ 5 =



Name _____ Date _____

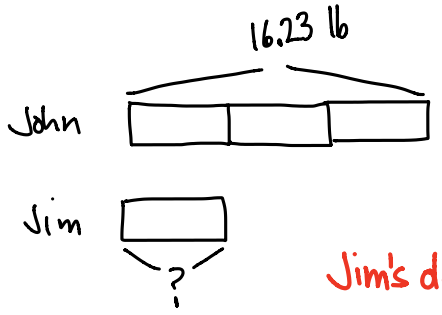
Write a word problem with two questions that matches the tape diagram below, and then solve.



QUESTIONS WILL VARY.

HERE ARE TWO EXAMPLES...

Q1: John's dog weighs three times as much as Jim's dog. John's dog weighs 16.23 pounds. How much does Jim's dog weigh?

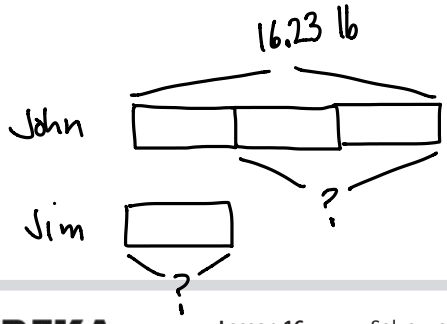


3 units = 16.23 lbs
1 unit = 5.41 lbs

$$3\overline{)16.23}$$
5.41
15
12
−12
03
−3
0

Jim's dog weighs 5.41 lbs.

Q2: John's dog weighs three times as much as Jim's dog. John's dog weighs 16.23 pounds. How much is John's dog than Jim's dog?



3 units = 16.23 lbs
1 unit = 5.41 lbs
2 units = 10.82 lbs

$$3\overline{)16.23}$$
5.41
15
12
−12
03
−3
0

John's dog weighs 10.82 lbs more.