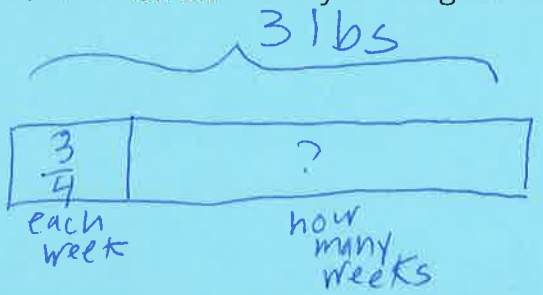
NAME DATE Wed 1/16 PERIOD

Unit 4, Lesson 4: How Many Groups? (Part 1)

1. A shopper buys cat food in bags of 3 lbs. Her cat eats $\frac{3}{4}$ lb each week. How many weeks does one bag last?

Total 1 Bag

a. Draw a diagram to represent the situation and label your diagram so it can be followed by others. Answer the question.

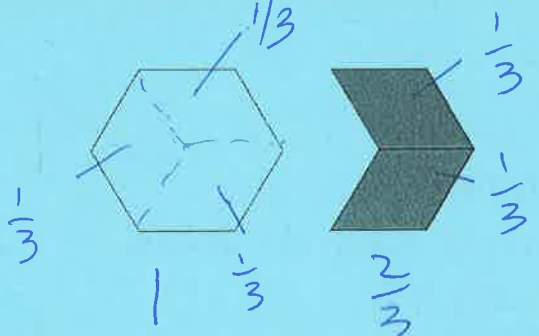


1/3

b. Write a multiplication or division equation to represent the situation. $3 \div \frac{3}{4} = 4$ weeks (3 lbs ÷ 3/4 lbs each week)

c. Multiply your answer in the first question (the number of weeks) by $\frac{3}{4}$. Did you get 3 as a result? If not, revise your previous work. $4 \times 3/4 = 3$ lbs yes

2. Use the diagram to answer the question: How many $\frac{1}{3}$s are in $1\frac{2}{3}$? The hexagon represents 1 whole. Explain or show your reasoning.



There are 5 1/3s in $1\frac{2}{3}$

$\frac{3}{3} + \frac{2}{3} = \frac{5}{3}$ /1

3. Which question can be represented by the equation $? \cdot \frac{1}{8} = 3$?

$3 \div \frac{1}{8} = ?$

next page $3 \div ? = \frac{1}{8}$

$3 \div \frac{1}{8} = ?$

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Why don't need to have, but please read

A. How many 3s are in $\frac{1}{8}$? NO $\frac{1}{8} \div 3$

B. What is 3 groups of $\frac{1}{8}$? NO $3 \times \frac{1}{8}$

C. How many $\frac{1}{8}$s are in 3? Yes $3 \div \frac{1}{8}$ 1/4

D. What is $\frac{1}{8}$ of 3? NO $\frac{1}{3} \times 3$

4. Write two division equations for each multiplication equation. Skip – but read through

a. $15 \cdot \frac{2}{5} = 6$ $6 \div \frac{2}{5} = 15$ $6 \div 15 = \frac{2}{5}$

b. $6 \cdot \frac{4}{3} = 8$ $8 \div \frac{4}{3} = 6$ $8 \div 6 = \frac{4}{3}$

c. $16 \cdot \frac{7}{8} = 14$ $14 \div \frac{7}{8} = 16$ $14 \div 16 = \frac{7}{8}$

5. Noah and his friends are going to an amusement park. The total cost of admission for 8 students is $100, and all students share the cost equally. Noah brought $13 for his ticket. Did he bring enough money to get into the park? Explain your reasoning.

$100 ÷ 8 = $12.50 1

$100 total, 8 students, each ticket

yes $13 is enough he'll have 50¢ extra

(from Unit 4, Lesson 2)

6. Write a division expression with a quotient that is: skip but read through

a. greater than $8 \div 0.001$ (smaller) $8 \div 0.0001$

b. less than $8 \div 0.001$ $8 \div .001$

c. between $8 \div 0.001$ and $8 \div \frac{1}{10}$ (bigger) $8 \div .01$

.1 between