Key   Wed 2/20/19

NAME   DATE   PERIOD

Unit 5, Lesson 1: Using Decimals in a Shopping Context

1. Mai had $14.50. She spent $4.35 at the snack bar and $5.25 at the arcade. What is the exact amount of money Mai has left?

A. $9.60
B. $10.60
C. $4.90
D. $5.90

14.50 had
− 9.60 spent
  4.90

spent
 4.35
 5.25
 9.60

2. A large cheese pizza costs $7.50. Diego has $40 to spend on pizzas. How many large cheese pizzas can he afford? Explain or show your reasoning.

Division — whole pizzas

5
7.50)40.00
    37 50
     2 50

5 pizza

Repeated Addition
7.50 + 7.50 + 7.50 + 7.50 + 7.50

15   15   7.50
2 pizza +   2 pizza + 1 pizza

3. Tickets to a show cost $5.50 for adults and $4.25 for students. A family is purchasing 2 adult tickets and 3 student tickets.

6   4

a. Estimate the total cost.
2(6) + 3(4) ≈ $24

b. What is the exact cost?
2(5.50) + 3(4.25)
11.00 + 12.75 = 23.75

c. If the family pays $25, what is the exact amount of change they should receive?
  25
− 23.75
  $1.25

count up
in head

4. Chicken costs $3.20 per pound, and beef costs $4.59 per pound. Answer each question and show your reasoning.

a. What is the exact cost of 3 pounds of chicken?
  3.20
×   3
  9.60

or think
3(3) + 3(.20)

b. What is the exact cost of 3 pound of beef?
  4.59
× 3
  3.77

harder to do
in head

c. How much more does 3 pounds of beef cost than 3 pounds of chicken?
  13.77 Beef
− 9.60 chix
   4.17   more

5. a. How many $\frac{1}{5}$-liter glasses can Lin fill with a $1\frac{1}{2}$-liter bottle of water?
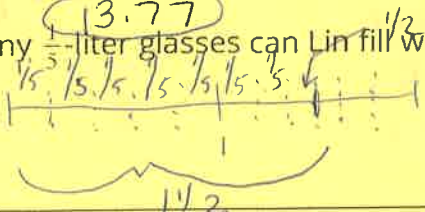
7½ from diagram   OR

$1\frac{1}{2} \div \frac{1}{5}$

$\frac{3}{2} \div \frac{1}{5}$ $\frac{3}{2} \times \frac{5}{1} = \frac{15}{2}$ 7½

NAME   DATE   PERIOD

b. How many $1\frac{1}{2}$-liter bottles of water does it take to fill a 16-liter jug?

(from Unit 4, Lesson 16)

$16 \div 1\frac{1}{2}$
$16 \div \frac{3}{2}$
$\frac{16}{1} \times \frac{2}{3} = \frac{32}{3} = 10\frac{2}{3}$ bottles

6. Use the grid to complete this problem.
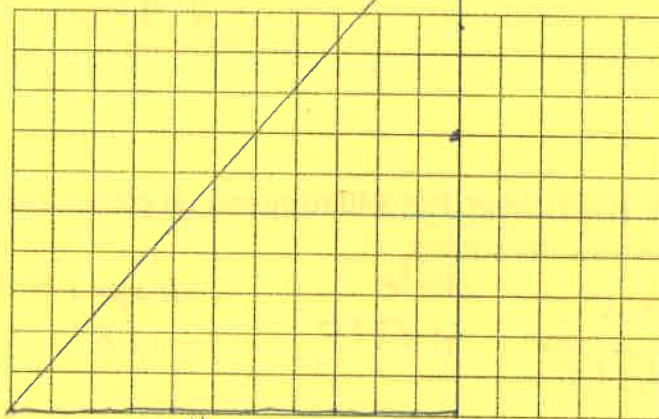
Challenge: $\frac{1}{2} \cdot b \cdot h$
$? = h$

$19\frac{1}{4} = \frac{1}{2} \times 5\frac{1}{2} \times ?$
$19\frac{1}{4} = \frac{1}{2} \times \frac{11}{2} \times ?$
$19\frac{1}{4} = \frac{11}{4} \times ?$
$\frac{77}{4} \div \frac{11}{4} = 7$ units

CD

is height
$5\frac{1}{2}$

only drew one

Let the side length of each small square on the grid represent $\frac{1}{2}$ unit. Draw two different triangles, each with base $5\frac{1}{2}$ units and area $19\frac{1}{4}$ units^2. Why does each of your triangles have area $19\frac{1}{4}$ units^2? Explain or show your reasoning.

I can make any triangle with base $5\frac{1}{2}$ ($\frac{11}{2}$) and height 7 units and it will have an area of $19\frac{1}{4}$ un^2.

(from Unit 4, Lesson 14)

7. Find each quotient.

a. $\frac{5}{6} \div \frac{1}{6}$

(from Unit 4, Lesson 10)

CD
already
$\frac{5}{6} \div \frac{1}{6} = 5$
OR
$\frac{5}{6} \times \frac{6}{1} = \frac{30}{6} = 5$

b. $1\frac{1}{6} \div \frac{1}{12}$

$\frac{7}{6} \div \frac{1}{12}$

CD $\frac{14}{12} \div \frac{1}{12} = 14$
or
$\frac{7}{6} \times \frac{12}{1} = \frac{84}{6} = 14$

c. $\frac{10}{6} \div \frac{1}{24}$

$\frac{10}{6} \div \frac{1}{24}$

CD $\frac{40}{24} \div \frac{1}{24} = 40$
OR
$\frac{10}{6} \times \frac{24}{1} = \frac{240}{6} = 40$