

43

Jim needs to rent a car. A rental company charges \$21.00 per day to rent a car and \$0.10 for every mile driven.

- He will travel 250 miles.
- He has \$115.00 to spend.

Write an inequality that can be used to determine  $d$ , the maximum number of days that Jim can rent a car.

*Inequality* \_\_\_\_\_

Jim believes the maximum whole number of days he can rent the car is 5. Is he correct? Why or why not?

*Explain your answer.*

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**GO ON**

- 44 Jennifer has 84.5 yards of fabric to make curtains. She makes 6 identical curtains and has 19.7 yards of fabric remaining. How many yards of fabric does Jennifer use per curtain?

Show your work or explain your answer.

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Answer \_\_\_\_\_ yards of fabric per curtain.

- 45 Jen's goal is to run a total of 22 miles in five days. The table below shows her log for the number of miles she ran on Monday, Tuesday, Wednesday, and Thursday.

JEN'S RUNNING LOG

Day	Distance (miles)
Monday	$4\frac{3}{4}$
Tuesday	$5\frac{1}{8}$
Wednesday	0
Thursday	$6\frac{1}{4}$
Friday	?

How many miles must Jen run on Friday to reach her goal?

*Show your work.*

Answer \_\_\_\_\_ miles

**GO ON**

- 46 Mario is setting up a new tent during a camping trip. The tent came with 7 feet of rope. The instructions are to use 34.5 inches of the rope to tie a tarp on top of the tent. Then, the remaining rope should be cut into  $8\frac{1}{4}$ -inch sections to tie the tent to stakes in the ground. Mario will use all of the rope as instructed. Write and solve an equation to determine the number of  $8\frac{1}{4}$ -inch sections of rope Mario can cut from the rope.

*Show your work.*

*Answer* \_\_\_\_\_

**GO ON**

**Section 2: Calculator Active**

Directions: Calculators are allowed on this part of the exam.

Time: 85 minutes.

23.

Jonah has a recipe that uses  $1\frac{1}{3}$  cups of brown sugar and  $2\frac{2}{3}$  cups of flour to make 24 muffins. He has a total of 7 cups of flour. Jonah wants to use all of his flour to make as many muffins as possible using this recipe.

**Part A**

Exactly how many cups of brown sugar will Jonah use if he uses all 7 cups of flour?

A.  $3\frac{3}{10}$  cups

B.  $3\frac{1}{2}$  cups

C.  $7\frac{5}{6}$

D.  $10\frac{8}{9}$

**Part B**

Exactly how many muffins will Jonah make if he uses all 7 cups of flour?

**Show your work.**

Answer: \_\_\_\_\_



28.

A group of friends gathered in a park for a scavenger hunt. From their starting point, Andy and Olga walked in opposite directions. Andy walked west 300 feet, and Olga walked east 400 feet.

**Part A**

Draw a number line, and plot Andy's and Olga's ending location. Consider the starting point to be 0, west to be the negative direction, and east to be the positive direction.

**Part B**

How far apart are Andy and Olga at their ending locations?

Answer \_\_\_\_\_ feet

**Part C**

Write two different expressions that you could use to find the distance between Olga and Andy.

Expression 1 \_\_\_\_\_

Expression 2 \_\_\_\_\_