

Summer Assignment for Incoming 7th Grade Students

Please answer each question completely. Make sure that you show all of your work and explain, when necessary. This assignment is to be turned in on the first day of school.

1) Jan is baking. She needs 4 cups of sugar. Her problem is that she only has a $\frac{1}{2}$ cup measure and a $\frac{3}{4}$ cup measure. What is the least number of scoops that she could make in order to get exactly 4 cups? Explain your answer.

2) The Andersons are buying a new home. They need to fence the yard because they have a dog. The yard is 72 ft. by 120 ft. Each fencing section is 8 ft.

- Draw a diagram of the Anderson's yard with fencing.
- How many sections of fencing will they need? Explain.
- How many posts will they need? (a post is needed at the end of each section). Explain.
- What is the area of the Anderson's yard?

3) You are pulling a raft up a river. You can go 15 miles a day. At night, while you are asleep, however, the current pushes the raft 3 miles back downstream. If you set out on Tuesday to get to a town 85 miles upstream, on which day will you arrive? Show all work and explain your answer!

4) The Smiths are buying a new Blu Ray player. Three stores have the model they want on sale this week. Here are the ads:

Radio Shop: Regular Price= \$200, Discount= 20% off

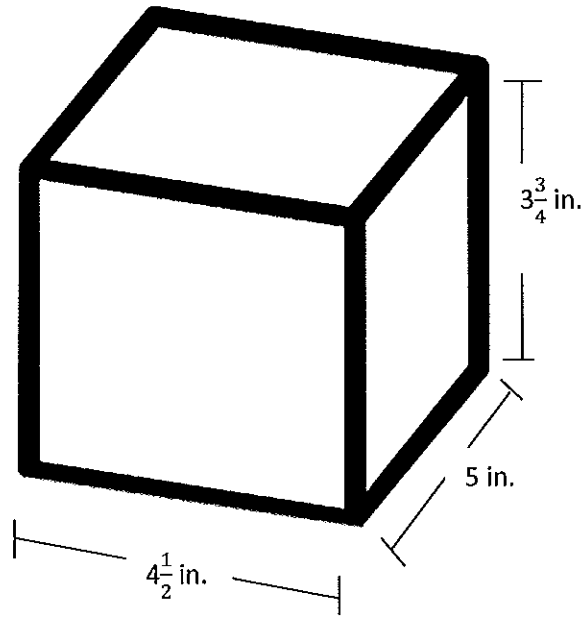
Discount City: Regular Price= \$180, Discount= 30% off

Ralph's: Regular Price= \$210, Discount= 10% off and they have an extra 20% off coupon

- How much will the Blu Ray player cost at each store?

- Which store should the Smiths buy from?

5. Small cubes with edge lengths of $\frac{1}{4}$ inch will be packed into the right rectangular prism shown.



How many small cubes are needed to completely fill the right rectangular prism?

6. A group of friends buys 8 bags of popcorn. Each bag contains $3\frac{1}{2}$ cups of popcorn. The popcorn is shared evenly among all 12 friends. How many cups of popcorn will each friend get? Show your work and explain your answer.

7. A group of 10 hikers plan to visit a scenic lookout. They will rest after they hike 2 miles. Then they will hike the remaining $1\frac{3}{4}$ miles to the lookout. The trail the hikers will use to return from the lookout is $\frac{1}{2}$ mile shorter than the trail they use to go to the lookout. Each hiker will bring $\frac{1}{4}$ gallon of water for each mile to and from the lookout.

A) Determine the total distance, in miles, each hiker will hike. You're your work and explain your answer.

B) Determine the total number of gallons of water each hiker will bring. Show your work and explain your answer.

8. The number of blueberry muffins that a baker makes each day is 40% of the total number of muffins she makes.

A) On Monday, the baker makes 36 blueberry muffins. What is the total number of muffins that the baker makes on Monday?

B) On Tuesday, the baker makes a total of 60 muffins. How many blueberry muffins does the baker make on Tuesday?

9. The scale on a map shows that 5 centimeters = 2 kilometers.

A) What number of centimeters on the map represents an actual distance of 5 kilometers?

B) What is the actual number of kilometers that is represented by 2 centimeters on the map?