## Unit 8 Lesson 2 Cumulative Practice Problems

1. The likelihood that Han makes a free throw in basketball is 60%. The likelihood that he makes a 3-point shot is 0.345. Which event is more likely, Han making a free throw or making a 3-point shot? Explain your reasoning.
2. Different events have the following likelihoods. Sort them from least to greatest:
* 60%
* 8 out of 10
* 0.37
* 20%
* $\frac{5}{6}$
*
1. There are 25 prime numbers between 1 and 100. There are 46 prime numbers between 1 and 200. Which situation is more likely? Explain your reasoning.
	* A computer produces a random number between 1 and 100 that is prime.
	* A computer produces a random number between 1 and 200 that is prime.
2. It takes $4\frac{3}{8}$ cups of cheese, $\frac{7}{8}$ cups of olives, and $2\frac{5}{8}$ cups of sausage to make a signature pizza. How much of each ingredient is needed to make 10 pizzas? Explain or show your reasoning.
* (From Unit 4, Lesson 2.)
1. Here is a diagram of a birdhouse Elena is planning to build. (It is a simplified diagram, since in reality, the sides will have a thickness.) About how many square inches of wood does she need to build this birdhouse?
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* (From Unit 7, Lesson 16.)
1. Select **all** the situations where knowing the surface area of an object would be more useful than knowing its volume.
	1. Placing an order for tiles to replace the roof of a house.
	2. Estimating how long it will take to clean the windows of a greenhouse.
	3. Deciding whether leftover soup will fit in a container.
	4. Estimating how long it will take to fill a swimming pool with a garden hose.
	5. Calculating how much paper is needed to manufacture candy bar wrappers.
	6. Buying fabric to sew a couch cover.
	7. Deciding whether one muffin pan is enough to bake a muffin recipe.
* (From Unit 7, Lesson 15.)



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