

Name: _____

Date: _____ Per: _____

Lesson 5.2.6 Homework

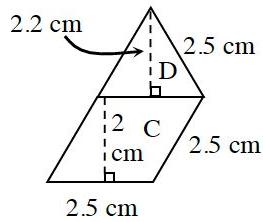
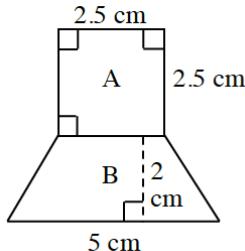
5-83. Darnell designed the spinner at right for a game. It still has one incomplete section.

- a. Help him figure out the probability of selecting a card on any turn. Show how you got your answer.

- b. What is the probability that on any turn you will not get to spin again?

- c. Which is more likely: to lose a turn or to select a card? Show how you know.

5-84. Manuel used pattern blocks to build the shapes below. The block marked A is a square, B is a trapezoid, C is a rhombus (a parallelogram with equal sides), and D is a triangle. Find the area of each of Manuel's shapes.



5-85. Rachel is collecting donations for the local animal shelter. So far she has collected \$245, which is 70% of what she hopes to collect. How much money does Rachel plan to collect for the shelter? Show your work.

5-86. Darnell is designing a new game. He will have 110 different-colored blocks in a bag. While a person is blindfolded, he or she will reach in and pull out a block. The color of the block determines the prize according to Darnell's sign at right.

- a. If he wants players to have a 60% probability of winning a small toy, how many blue blocks should he have?

blue → small toy
purple → hat
green → large stuffed animal

- b. If he wants players to have a 10% probability of winning a large stuffed animal, how many green blocks should he have?

5-87. Simplify the following expressions.

a. $1\frac{1}{2} + 2\frac{1}{8}$

b. $\frac{4}{5} - \frac{2}{3} + \frac{1}{6}$

c. $5\frac{3}{5} - 1\frac{4}{5}$

5-88. Lucas is having yogurt and an apple for a snack. There are five containers of yogurt in the refrigerator: three are raspberry, one is vanilla, and one is peach. There are also two green apples and three red apples.

a. If he reaches into the refrigerator to get a yogurt without looking, what is the probability that Lucas will choose a raspberry yogurt?

b. What is the probability that he will choose a red apple if it is the first item he selects?

C. What is the probability that Lucas will eat a raspberry yogurt and a red apple?

5-89. A bag contains 3 red, 5 yellow, and 7 purple marbles. Find the probability of drawing a purple marble followed by a red marble. The first marble is put back in the bag between draws.