

Tonica Grade School
Learning Lesson
Packet 1

Grade: 8 (Math)

Teacher: Heider

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8th Grade Math

1. IXL

- Y.1 Find the slope of the graph (Ch.3 Lesson 2 Review) Smartscore= ____/80
- W.15 Find the number of solutions (Ch.3 Lesson 7 Review) Smartscore= ____/80
- Q.3 Dilations: Find the coordinates (Ch. 6 Lesson 4 Review) Smartscore= ____/80

You may email me if you forgot your login information. I will get back to you asap. Don't forget to click on "learn with an example" if you need help. Also, make sure to look at the explanation anytime you get a problem incorrect.

2. Volume of a Cylinder Practice Problems/ Engaging Questions (2 pages)

(Ch.8 Lesson 1 Review)

Use your notes. They will be helpful for all of this work. If you don't have your notes, sign-in to the online textbook and look at the examples. You should have your login information for the textbook.

*Reminder: the website is <https://my.mheducation.com/login?logout=true>, your username is first initial, last name, graduation year (no spaces or commas) and your password is tgs, student id (no spaces or commas)

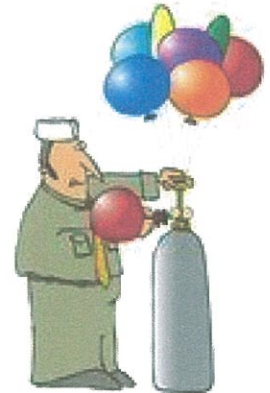
Do your best on this work. You can do it! If you have any questions, email me and I will get back to you asap.

-Ms. Heider

As soon as you arrive at the Circus, you decide you want a balloon. Stopping at the "Balloon Stand" you see a HUGE tank that holds the helium. You are interested in knowing how much helium the tank can hold. Fortunately, you were just taught in Math class that: *use 3.14 for pi and round the answer to nearest hundredth

$$\text{Volume of a Cylinder} = \pi r^2 \times \text{height}$$

So, you ask the man behind the counter the dimensions of the tank and he tells you that it is 5.5 feet tall and the radius is 2 feet. How much does the tank hold? _____



Your little sister is tagging along for the day at the circus and really wants a soft pretzel with nacho cheese, so you make your way over to the food tent at the circus. Your sister wants to learn how to find the volume of a cylinder, so you tell her the formula is:

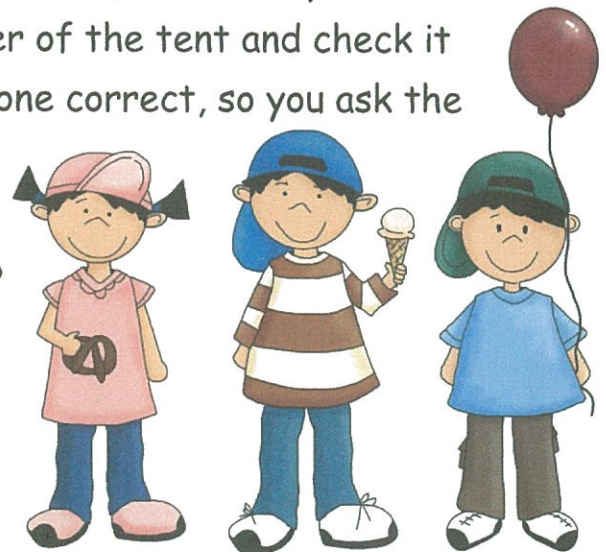


_____.

You ask the woman at the counter the dimensions of the nacho cheese can and she tells you that it is 9 inches tall and the diameter is 6 inches. Your sister comes up with 54 inches³. Is she correct? _____
What is the correct answer? _____ Why?



Josh, your buddy, meets up with you, and when he does, he is ready for some ice cream. You notice an ice cream cart in the corner of the tent and check it out. Your little sister is determined to get this one correct, so you ask the dimensions of the ice cream canister. The man tells you that one canister is 7.5 inches tall and has a diameter of 5 inches. What is the volume?

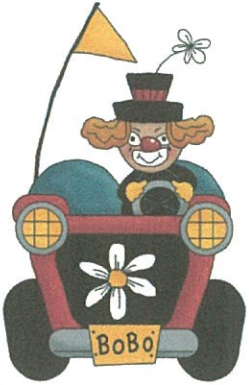
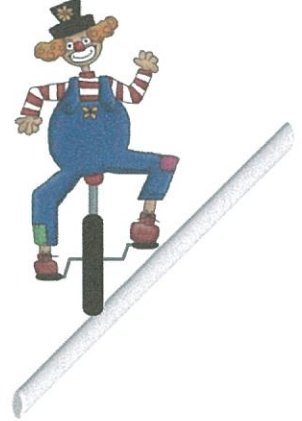




The first act at the carnival is a dancing bear. He is standing on a barrel that is 4 feet tall and has a radius of 3.45 feet.

What is the volume of the barrel? _____

Clippy the clown is on a tricycle crossing a small pole. To grab the audience's attention, they tell you that the pole is only 3 centimeters wide and 100 centimeters long. What is the volume of the pole Clippy is on? _____



Bobo rides in next in his clown car. As he's riding around the Carnival, he's squirting all the kids with water that is coming out of the flower on the front of his car. The flower is attached to a canister of water inside the car. It needs to be small (because all clown cars are small) and inconspicuous. It measures 2.2 feet tall and has a diameter of 1.9 feet. What is the volume of the water canister? _____

You run into some friends from school, Clyde and Thomas. They are on the "FUN AND SPIN" ride. Once they get off of the ride, they talk about their homework assignment. Since all of the students were going to the carnival, your teacher wanted you to bring a real-world example from the carnival to class tomorrow on volume of cylinders. Pretending their cart is a cylinder, they decide that they will estimate the size of their "FUN AND SPIN" cart. How tall is the cart? _____

What is the diameter? _____

What is the radius? _____

What is the volume of the cart? _____

