**Cylinder Activity**

11 inches

8.5 inches

11 inches

8.5 inches

1. Calculate the surface areas of both cylinders
2. Which of the following is true according to your prediction from the sinkhole picture?
   1. Long cylinders have a bigger volume
   2. Short cylinders have a bigger volume
   3. Both cylinders have the same volume
3. Calculate the volumes of the cylinders
4. .

Coffee Anyone?

[](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=ivUNlq2QRTduxM&tbnid=oCX2BrehLe_NbM:&ved=0CAUQjRw&url=http://clipartsy.com/svg/pitr-coffee-cup-icon-black-white-line-art-scalable-vector-graphics-svg-clip-art-wall-paper-background-clipartist-org-clipart-clip-art-inkscape-svg-public-domain-royalty-free-scalable-vector-graphics-v/&ei=M-Y4Ud_tEMusqQG59IGgCA&bvm=bv.43287494,d.aWM&psig=AFQjCNHpbEjgtd5i-JWCvZaxYeFVdn1yVg&ust=1362769819367644)

The Gourmet Gift Baskets team wants to break the record for the biggest coffee cup.

*Let’s watch the video!*

1. Will that cup be enough to break it?
2. How many liters of coffee do you think will fit inside?

*What information would help solve this problem?* List them here:

Here’s some information:

5. How long do you think it'll take them to fill up the cup?

6. How many regular-size cups of coffee would fit inside that super-size cup of coffee?