

1. How much material will they need to fill the sinkhole?

a) Begin by estimating a range of answers:

A horizontal number line with three vertical tick marks. Below the line are three rectangular boxes. The first box on the left is labeled "Too low:" and contains a blank line. The middle box is labeled "My first estimate:" and contains a blank line. The third box on the right is labeled "Too high:" and contains a blank line.

b) What do you need to know to calculate a more exact answer to the question?

c) Use this information to improve your estimate. Show that work here:

d) What is your improved estimate? In words, explain your rationale for this answer.

2. If they fill the hole with concrete, how much would the concrete itself cost?  
(ignore labor and other materials)

a) Begin by estimating a range of answers:

A horizontal number line with three vertical tick marks. Below the line are three rectangular boxes. The first box on the left is labeled "Too low:" and contains a blank line. The middle box is labeled "My first estimate:" and contains a blank line. The third box on the right is labeled "Too high:" and contains a blank line.

b) What do you need to know to calculate a more exact answer to the question?

c) Use this information to improve your estimate. Show that work here:

d) What is your improved estimate? In words, explain your rationale for this answer.