

**Warmup from Design and Measurement Workbook**

**JUNE 2015**

①

Select the best answer.

How many cubic yards are in 54 cubic feet?

- A. 2      B. 3      C. 6      D. 18

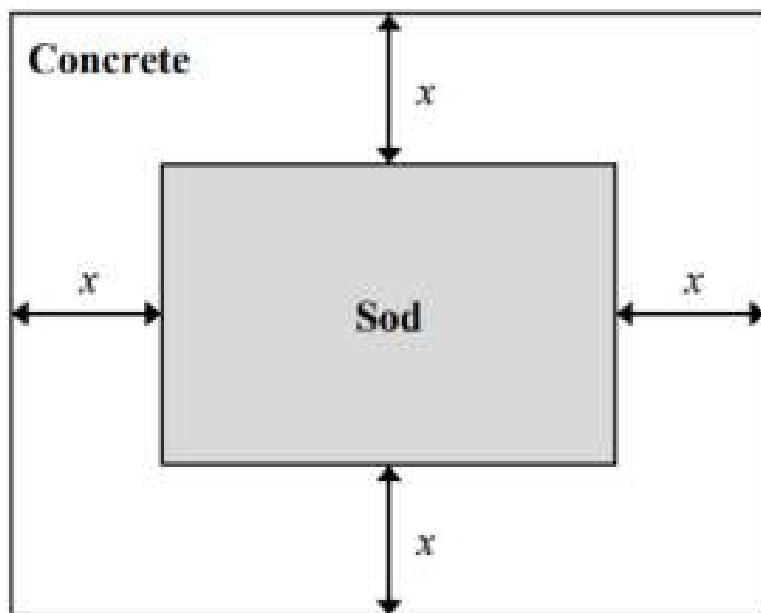
②

One can of paint can cover an area of 200 ft<sup>2</sup>.

How many cans need to be purchased to paint a 60 ft. by 8 ft. wall?

*[remember to round up!]*

James is landscaping his 50 ft. by 40 ft. yard. He will construct a concrete walkway with a uniform width of  $x$  around the centre of the yard which is to be covered in sod, as illustrated below. (Diagram is not drawn to scale.)



*You will need a blank sheet of paper!!*

Consider the following:

- The walkway must be at least 3.5 feet wide.
- The concrete must be poured 6 inches deep.
- The concrete costs \$3.00 per cubic foot, plus GST and PST.
- The sod costs \$0.40 per square foot, plus GST and PST.
- The budget for this project is \$2150.00.

a) Design a walkway that fits within the budget. Indicate the width of the walkway and the dimensions of the sod below.

Width of the walkway ( $x$ ): \_\_\_\_\_ ft.

Dimensions of the sod: \_\_\_\_\_ ft. by \_\_\_\_\_ ft.

b) Calculate the total cost of your design. (Note: GST 5%, PST 8%)