

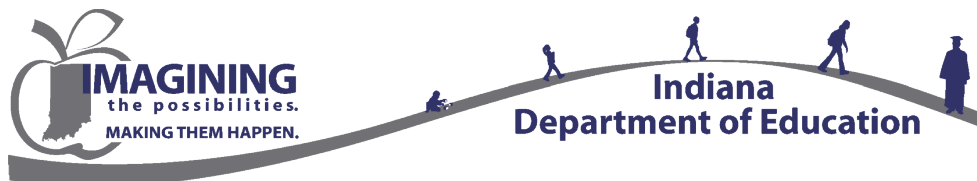
ISTEP+ Spring 2013

Indiana Statewide Testing for Educational Progress Plus

Râ~^à b â~ä] = Ó \ãã] ^ÊQâ \ã | âãà N[~] = Ú | ä~ää Ú~ | æ~à]

Grade 7

Web Version



Use only a Number 2 pencil to respond to the questions in this book. Responses written in pen CANNOT be scored.

Acknowledgments: CTB is indebted to the following for permission to use material in this book.

“Sierra Oscar Sierra” by Lynn Murray from *Highlights for Children* Magazine’s January 2003 issue, copyright © 2003 by Highlights for Children, Inc., Columbus, Ohio. Used by permission.

Excerpt from “*Speech made by Nelson Mandela at the Cathedral of St. John the Divine, New York City, September 20, 1988*” (Unique ID NMS630) courtesy of the Nelson Mandela Foundation.

All brand and product names found in this publication are the trademarks or registered trademarks of their respective companies and are not associated with the publisher of this publication.



Developed and published under contract with State of Indiana Department of Education by CTB/McGraw-Hill LLC, 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2013 by State of Indiana Department of Education. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of State of Indiana Department of Education.

Printed in U.S.A.
1 2 3 4 5 ROV 15 14 13

**DO
NOT
MARK
ON THIS
PAGE**



If you see this symbol, you may use your reference sheet to help solve the problem.



If you see this symbol, you may use a calculator to solve problems in the test.

NOTE: A correct answer **CANNOT** receive full credit if no work is shown.

Since you may receive partial credit for all problems in this test, it is important to show ALL work in the spaces provided in this book. When you see the words **Show All Work**, be sure to

- **show all the steps needed to solve the problem**
- **make your handwriting clear and easy to read**
- **write the answer on the answer line**

As you complete each problem, remember to

- READ** the problem carefully
- PLAN** how to solve the problem
- SOLVE** the problem showing all steps
- CHECK** your work

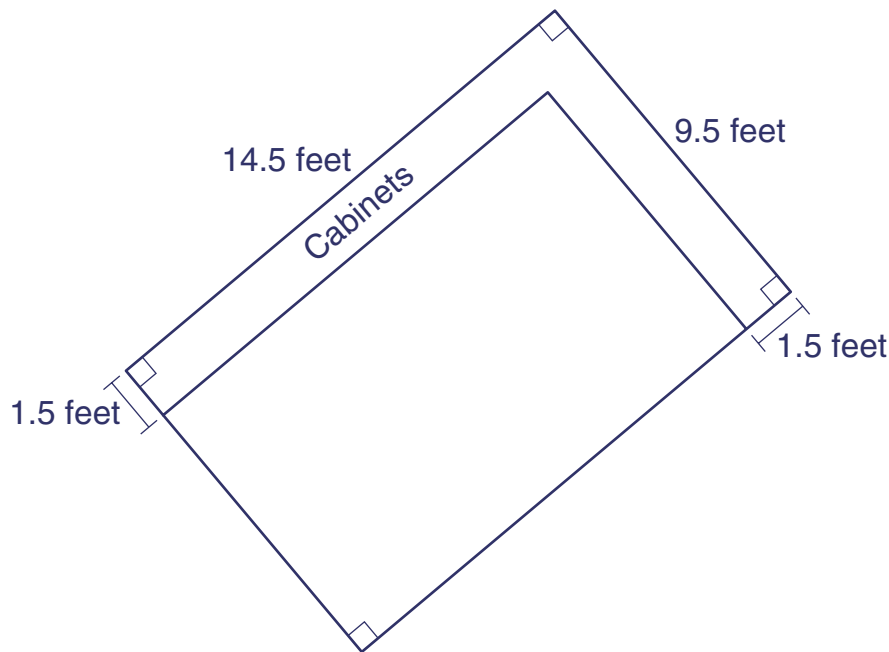
Session 1: Mathematics



1



Ms. Thompson is installing a new tile floor in her kitchen. There are cabinets along two sides of the kitchen floor that are 1.5 feet wide, as shown in the diagram below.



What is the area of the kitchen floor, not including the area covered with cabinets?

Show All Work

Answer _____ square feet

Go On



Session 1

Each 1-foot square tile costs \$4.50, before tax.

What would be the cost, before tax, to purchase enough 1-foot square tiles to cover the part of the kitchen floor that does not have cabinets on it, plus 10 extra tiles?

Show All Work

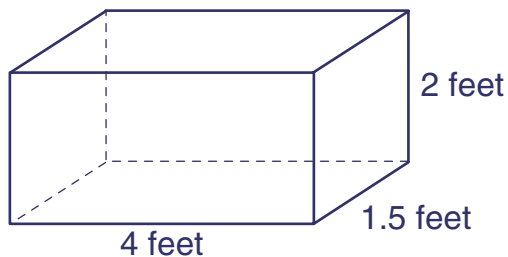
Answer \$ _____



Session 1

2

Angela is using water from her well to fill a fish tank that is shaped like a rectangular prism, as shown in the diagram below.



Angela is going to fill the fish tank to a level that is 3 inches below the top of the tank. Angela's well pumps 8 gallons of water per minute.

How many minutes will it take to fill the fish tank?

1 cubic foot \approx 7.5 gallons

Show All Work

Answer _____ minutes

Go On



3

Emily is playing a game. She needs 300 points to win the game. She scored 34 points on her first turn, 27 points on her second turn, and 23 points on her third turn.

Write an equation that can be used to determine the number of turns, n , Emily needs to win the game if she scores 27 points on each remaining turn.

Equation _____

The maximum number of points that can be scored on 1 turn is 40 points.

How many fewer turns will it take Emily to win the game if she scores 40 points on each of her remaining turns than if she only scores 27 points?

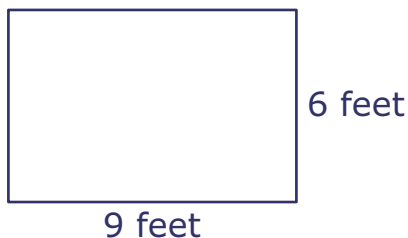
Show All Work

Answer _____ fewer turns

Session 1

4

A company is having 2 rectangular signs made to place in front of their building. A diagram of sign A is shown below.



Sign B is similar to sign A. The dimensions of sign B are $\frac{1}{3}$ the dimensions of sign A. The company will be charged in the following manner to have the signs made.

- \$18 per square foot for signs over 20 square feet
- \$13 per square foot for signs 20 square feet and under

What will be the total cost for the company to have both signs made?

Show All Work

Answer \$ _____

The company is thinking about having a third rectangular sign made to put on the side of their building. They want the sign to have the greatest area possible and still be charged at the \$13 rate instead of the \$18 rate.

What is a possible length and width of the third sign?

Length _____ feet

Width _____ feet

STOP! - - - - **STOP!** - - - - **STOP!** - - - - **STOP!** - - - - **STOP!** - - - -



ATTENTION!

Do **NOT** go on
until you are
told to do so.



STOP



ATTENTION! Please do not leave your
punchouts or reference sheet in this book.