

## Keeping It Real Assessment Introduction

*Keeping It Real Assessments* have been designed to be as close to real life as possible to show the relationships between math and everyday life. They allow you to apply your learning of course content in unique ways. You can ask your teacher for clarification or to verify your thought processes. Ultimately, however, the work should be your own.

This course has four *Keeping It Real Assessments*, from which you **must choose two**.

**Unit A – Budgeting for Fun**

**Unit B – Mathtracker**

**Unit C – Burger Shack**

**Unit D – Dream Room**

You will be assessed on each concept, rather than on each individual question. Work related to each concept will be graded on a scale from 0 to 4, according to the criteria listed below. In addition, a maximum of **2 marks** will be awarded for the use of **proper units** throughout the entire assessment.

| Concept Criteria |  |
|------------------|--|
| 0                | No score is awarded because there is insufficient evidence of student performance based on the requirements of the task.   |
| 1                | First step only was completed, or correct formula was written, but not used correctly, or a diagram was drawn, but no further work was appropriate, or an incorrect method/process was used.   |
| 2                | Half of a solution is present, with a correct initial method/process, or major algebraic mistakes were made, or the incorrect information was used, or information was transferred incorrectly, or one part was correct, but another part was incorrect. |
| 3                | Most of the solution is correct, with the entire method/process being correct, but a calculation error, an algebraic error, or a calculator error was made.  |
| 4                | Correct answers obtained with correct methods/processes.   |

# Keeping It Real Assessment

## Unit D

### Dream Room

#### Background

You are going to create your Dream Room. There will be different types of furniture and items that you must choose from for your Dream Room. Money is no object, but space is, so keep that in mind, and have fun with this!



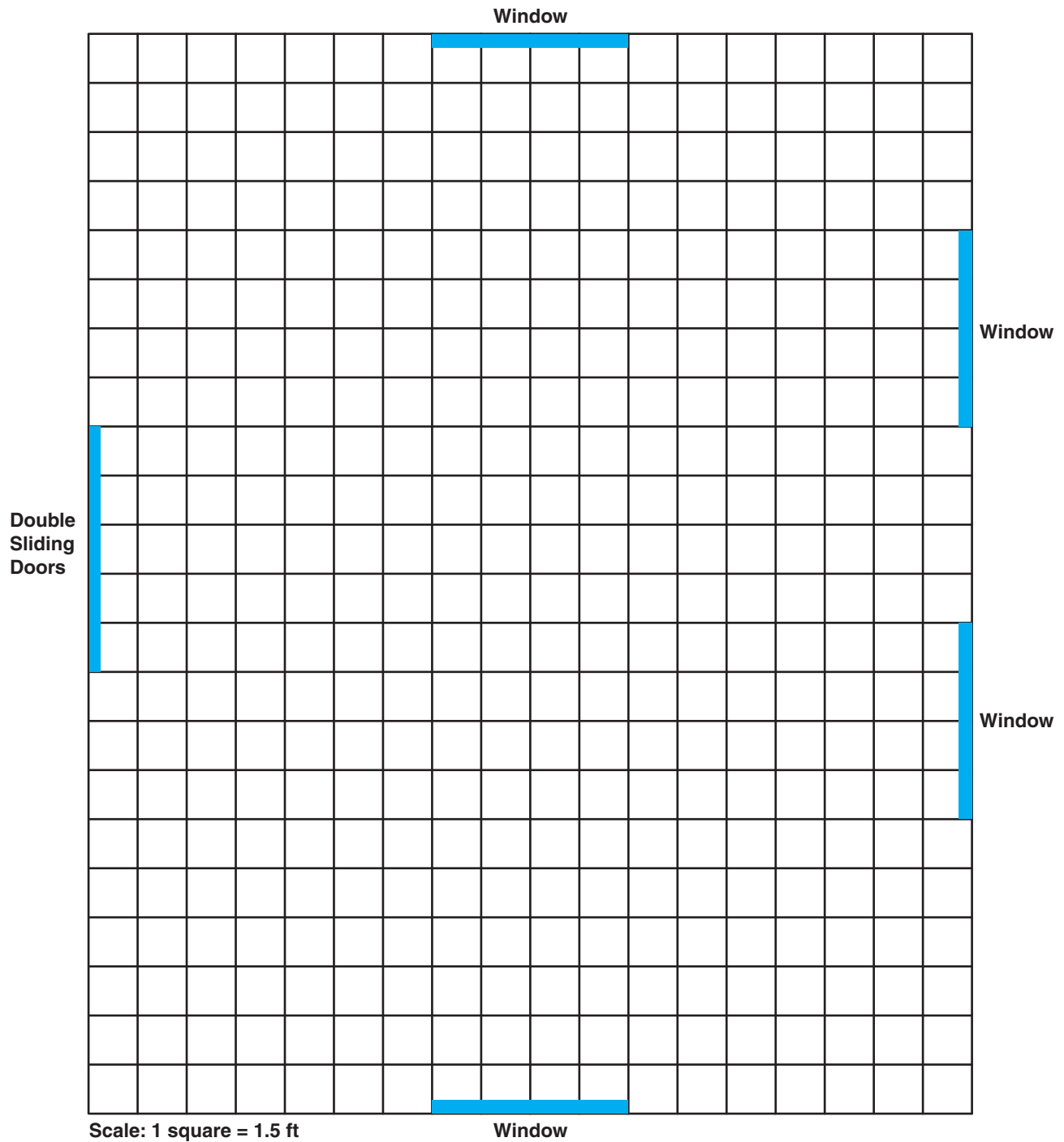
© Thinkstock

Complete the following tasks:

1. Choose items for your room, and determine their scale sizes for the floor plan.
2. Draw the floor plan of your Dream Room.
3. Calculate and estimate the area.

The available space for your Dream Room is rectangular in shape and measures 27 ft by 33 ft. The diagram below is a scale drawing of the space, with the doors and windows labelled.

**Note:** Please use this diagram as a planning page for your Dream Room.



## Task 1: Choose items for your Dream Room, and determine the scale sizes for the floor plan.


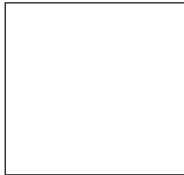

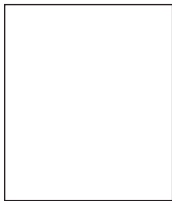


You will now need to choose items for your Dream Room.



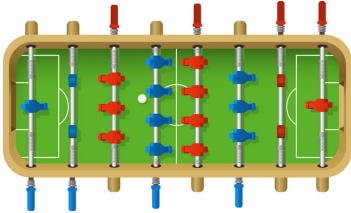
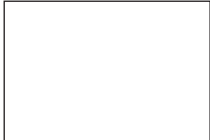
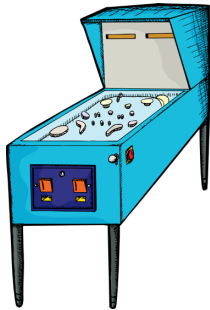





You may use more than one particular item in your Dream Room. For example, you may choose to have two king beds in your dream room. It is up to you.







### 1. Rectangular and Square Items

Choose **5 or more** different items for your dream room from this section. You may choose more than one of the same item, but for assessment purposes, you must choose 5 or more unique items from this section. For example, you may want two identical nightstands in your room, but you still need to choose at least 4 other items from this list.

Complete the table below by stating the scale size of each object, in number of squares, for your chosen items only.

| #  | Item Description  | Top View of Item<br>(with dimensions)   | Scale Size measured in<br>Squares<br>Scale: 1 square = 1.5 ft |
|----|---|---|---|
| R1 | <br>King Size Bed  | $l = 6.5 \text{ ft}$<br><br>$w = 6.5 \text{ ft}$ |   |
| R2 | <br>Queen Size Bed | $l = 5 \text{ ft}$<br><br>$w = 6.5 \text{ ft}$   |   |
| R3 | <br>Mini Fridge    | $l = 1.5 \text{ ft}$<br><br>$w = 1.5 \text{ ft}$ |   |


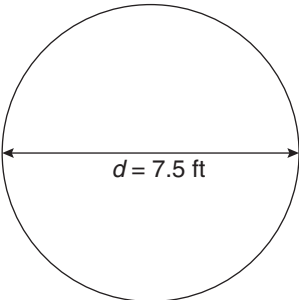

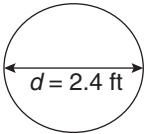

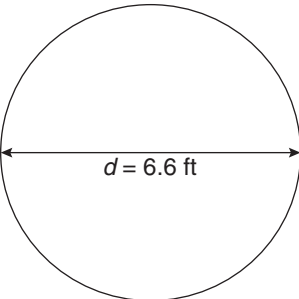

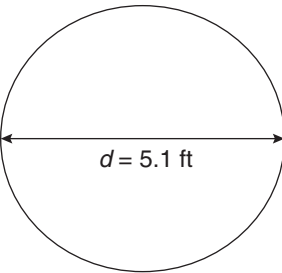
|    |   |   |  |
|----|---|---|--|
| R4 |  <p>Pool Table</p>         | $l = 7.0 \text{ ft}$<br><br>$w = 3.5 \text{ ft}$    |  |
| R5 |  <p>Foosball Table</p>     | $l = 4.0 \text{ ft}$<br><br>$w = 2.5 \text{ ft}$    |  |
| R6 |  <p>Pinball Machine</p>   | $l = 4.5 \text{ ft}$<br><br>$w = 2.4 \text{ ft}$   |  |
| R7 |  <p>Big Screen HD TV</p> | $l = 5.4 \text{ ft}$<br><br>$w = 0.25 \text{ ft}$ |  |
| R8 |  <p>Couch</p>            | $l = 7.2 \text{ ft}$<br><br>$w = 3.3 \text{ ft}$  |  |

|     |   |   |  |
|-----|---|---|--|
| R9  |  <p>Recliner Chair</p> | <p><math>l = 3.5 \text{ ft}</math></p>  <p><math>w = 3.3 \text{ ft}</math></p>   |  |
| R10 |  <p>Dresser</p>        | <p><math>l = 5.1 \text{ ft}</math></p>  <p><math>w = 1.3 \text{ ft}</math></p>  |  |
| R11 |  <p>Nightstand</p>    | <p><math>l = 1.75 \text{ ft}</math></p>  <p><math>w = 1.3 \text{ ft}</math></p> |  |

## 2. Circular Items

Choose **2 or more** different items for your dream room from this section. You may choose more than one of the same item, but for assessment purposes, you must choose 2 or more unique items from this section.


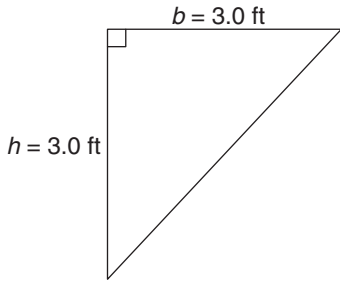

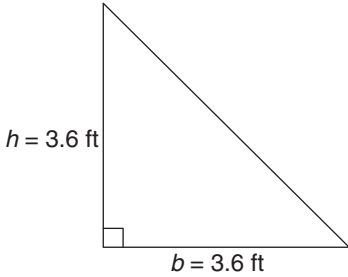
Complete the table below by stating the scale size of each object, in number of squares, for your chosen items only.

| #  | Item Description  | Top View of Item<br>(with dimensions)  | Scale Size measured<br>in Squares<br>Scale: 1 square =<br>1.5 ft |
|----|---|--|--|
| C1 | <br>Circular Bed       |   |  |
| C2 | <br>Bean Bag Chair   |  |  |
| C3 | <br>5 Person Hot Tub |  |  |
| C4 | <br>Rug              |  |  |

3. Triangular Items

Choose **1 or more** different items for your Dream Room from this section.

Complete the table below by stating the scale size of each object, in number of squares, for your chosen items only.


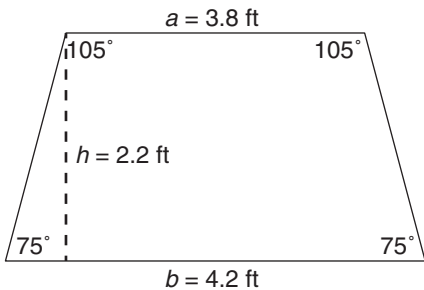
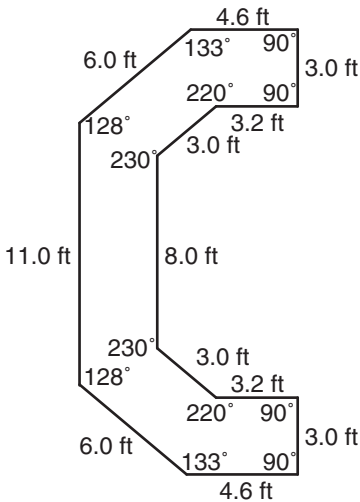
| #  | Item Description   | Top View of Item<br>(with dimensions)   | Scale Size measured in<br>Squares<br>Scale: 1 square = 1.5 ft |
|----|--|---|---|
| T1 |  <p>Corner Desk</p>       |   |   |
| T2 |  <p>2 Person Hot Tub</p> |  |   |



4. Special Items for your Dream Room

Choose **1 or more** items for your Dream Room from this section.

Complete the table below by stating the scale size of each object, in number of squares, for your chosen item(s) only.

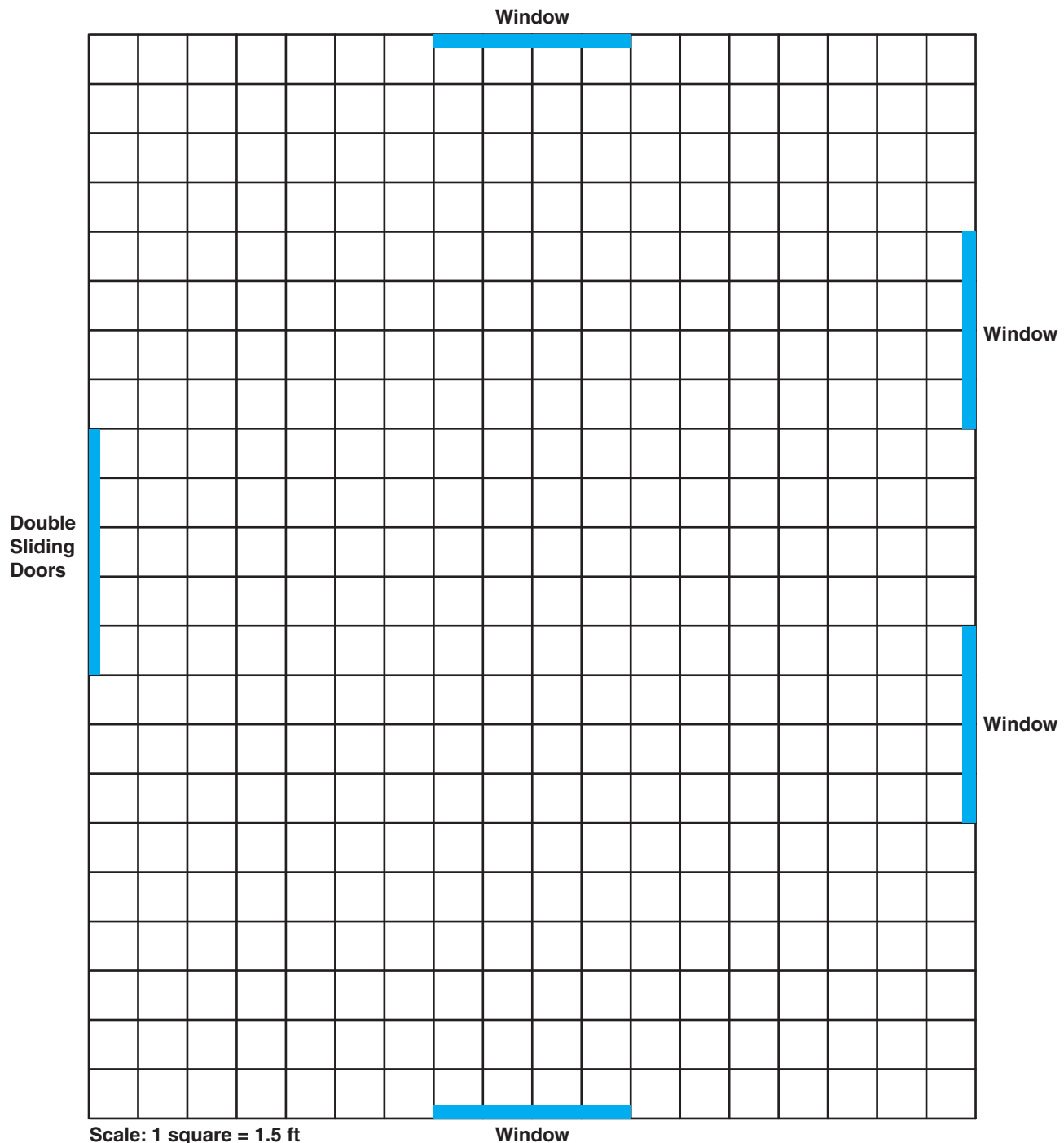
| #  | Item Description  | Top View of Item<br>(with dimensions)  | Scale Size measured in<br>Squares<br>Scale: 1 square = 1.5 ft |
|----|---|--|---|
| S1 |  <p>Corner Fish Aquarium</p> |    |   |
| S2 | <p>Stadium Seating</p>  |  |   |

## Task 2: Draw the floor plan of your Dream Room.

The available space for your Dream Room is rectangular in shape and measures 27 ft by 33 ft. The diagram below is a scale drawing of the space, with the doors and windows labelled. Place the items chosen in Task 1 in your room, as desired.

**Note:**

- Please leave a **minimum of 3 ft**, or two squares, wherever walking space is needed.
- Label each item on the scale diagram.
- Use a ruler to draw each piece. Colouring is optional.



### Task 3: Calculate and Estimate Area.

1.
  - a. What is the area of your empty Dream Room? Please give your answer in square feet.
  - b. Estimate the area that is taken up by the furniture in your Dream Room. Round your answer to the nearest whole number.
  - c. What is the area of the unused space in your Dream Room? Round your answer to the nearest whole number.

## Grading Scheme for Keeping It Real Assessments

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### Keeping It Real D

| Concept   | 0-4 rating | comments |
|---|------------|----------|
| Calculate scale size  |            |          |
| Label items on final diagram  |            |          |
| All items drawn to scale using ruler  |            |          |
| Meets minimum standards of assignment (correct number of required items from each category) |            |          |
| A minimum of 3 ft is allowed wherever walking space is needed                               |            |          |
| Construct Similar Polygons  |            |          |
| Calculate Area  |            |          |
| Estimation of Area  |            |          |
|   |            |          |
| Use of Proper Units   | /2         |          |
|   |            |          |
| Total Marks   | /34        |          |