

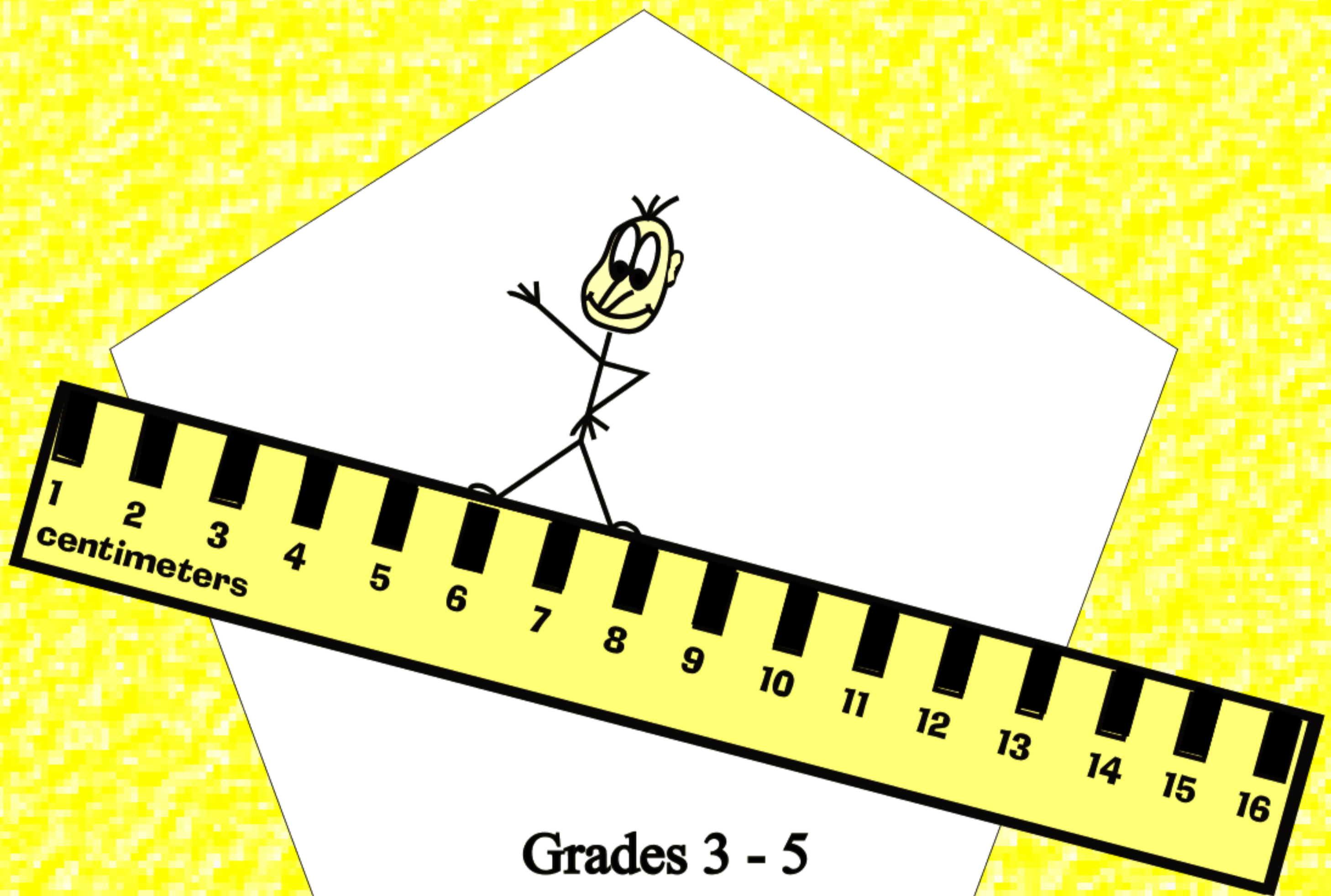
From the 'Just Turn & Share' Centers Series



Linear Measure

From the *Just Turn & Share*[™] Centers Series

Kathryn Robinson

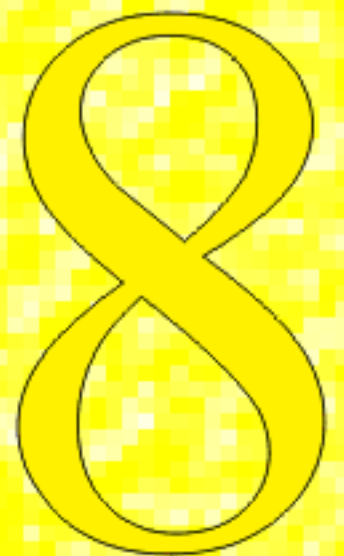


Real-World Mathematics

www.writemath.com



WriteMath Enterprises
2303 Marseille Ct. Suite 104
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813 685 0392



Just Turn & Share™
Math Centers Series



Linear Measure

Volume 8

(Grades 3 – 5)

Real-World
Mathematics
that
students
understand

Kathryn Robinson

 WriteMath Enterprises
Valrico, Florida

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- I dedicate this series to my husband, Steve Robinson, for advising, supporting, guiding, and editing years of work and making my dreams possible.
- I would also like to dedicate this series to my brother-in-law, Michael Ghormley, for his expert mathematical advice, patience, and willingness to answer my constant questions over a period of several years.

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Introduction

Linear Measure is a great center in the 'Just Turn & Share' Series. This series gives students **daily** practice in 16 math areas or a math topic of your preference. After gradually working in a center-based atmosphere, students can tackle all 16 centers in half an hour. This program can be used in conjunction with any regular math series. Some students have difficulty attaining proficiency in specific math areas due to the limited practice provided by a textbook. '*Just Turn & Share*' math centers provide real-world practice with mathematical concepts.

The series is designed for center-based review of concepts or as whole-group overhead instruction. These lessons are designed to provide practice for 30 weeks of the school year. The program contains three-week sets worth of practice in each concept. Each concept is covered for three weeks before a new concept is introduced to the students. During each three-week period, only the numbers change - not the concepts. The first week is designed as a review of the concept, the second provides further practice, and the third is set apart for mastery of the concept. As your students become more proficient in one particular concept, you might choose to eliminate the third week set to move to a new concept. The third week then serves as a review during the last ten weeks of the year or intensive practice prior to standardized testing.

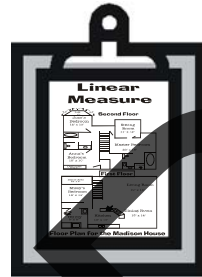
The new concept for the week is listed in the *Table of Contents*. At the onset of a new concept, we recommend that teachers conduct a mini-lesson before releasing students to work the centers. Each center contains concept-information sheets with student-directions about how to perform individual concepts. These information sheets have a third-grade readability level. I recommend that the information sheets remain at the centers as long as possible to accommodate new students entering the class throughout the year. Many weeks in the series contain reference sheets that contain data that students will need to perform certain operations. Both the information sheets and reference sheets are located at the beginning of each week.

This center contains:

1. Information sheets designed to remain at the center
These sheets relate to pertinent information about linear measurement concepts.
2. Daily student activity sheets

Suggestion:

Each center sheet should be placed in a plastic protective cover.



- (*) **Grade 3** students calculate the single asterisk activities
- (**) **Grade 4** students calculate the double asterisk activities
- (***) **Grade 5** students calculate the triple asterisk activities

If you are using more than five centers in the classroom, I recommend using the answer sheet to help students keep track of the completed centers. Accompanying each complete set is a set of corrected answer sheets that help students self-correct their responses. Students self-correct their answer sheets three out of the four days. Self-correction prevents embarrassment and allows students time to practice each concept before an assessment. I place a sign-up sheet in the classroom to allow students to sign up for assistance in their less proficient areas. I assist those that have signed up for help during the next day's *Center Time*. The fourth day of each week is teacher-corrected and entered in a grade book. If you have any questions please feel free to e-mail us on our website:

www.writemath.com.

I know that you will have as much fun employing this program as I have had designing it. Remember the program is as simple as *turning each page and sharing* the activities with your class. So go ahead just...

Turn & Share

with your students.

Just Turn & Share Answer Sheets

Front

Back

1. Each sheet is divided into sections according to the names of the centers.
(*e.g. Time*)
2. Students write the letter for the problem in the smaller box.

A	3:00	B	4:00
C	1 hour	D	News

3. Students write the answer in the larger box.
4. Students check the sheet to determine whether or not they have completed all of the centers.

Graphics from: *Corel Draw 8* (Corel Corporation) & Microsoft *Publisher*

Name:		Date:		Day #1	Day #2	Day #3	Day #4
Time:		Estimation:		Calendar:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Number Sense:		Grid:		Temperature:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Place Value:		Volume:		Weight/Mass:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
Algebra:							
<input type="checkbox"/>	<input type="checkbox"/>						
Graph:							
<input type="checkbox"/>	<input type="checkbox"/>						
<input type="checkbox"/>	<input type="checkbox"/>						

Linear Measure:		Fractions/Decimals:	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geometry:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Money:			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinking:			
<i>range:</i>	<i>median:</i>	<i>mean/average:</i>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<i>mode:</i>		
	<input type="checkbox"/>		

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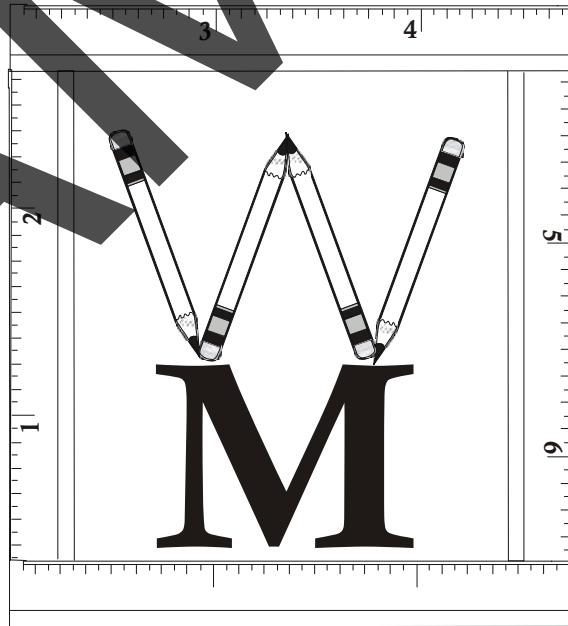
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Answer Sheet 138

SAMPLE



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Centers in the 'Just Turn & Share' Math Center Series:

1. Algebra
2. Calendar
3. Estimation
4. Fractions & Decimals
5. Geometry
6. Graph
7. Grid
8. Linear Measure
9. Money
10. Number Sense
11. Place Value
12. Temperature
13. Thinking: Range, Median, Mode, Mean
14. Time
15. Volume
16. Weight & Mass

For more information:

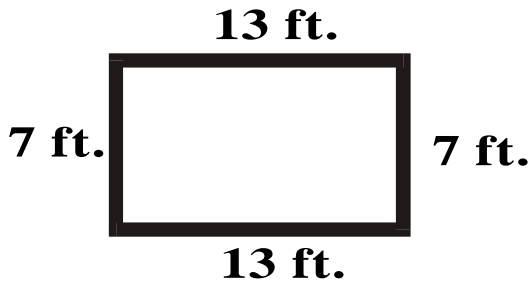
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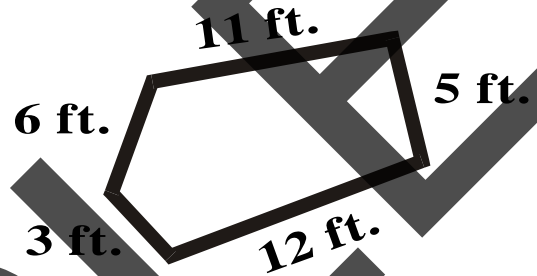
SAMPLE

Perimeter

The **perimeter** of an object is the distance around the object. To find the perimeter, **add** the lengths of the object's sides.



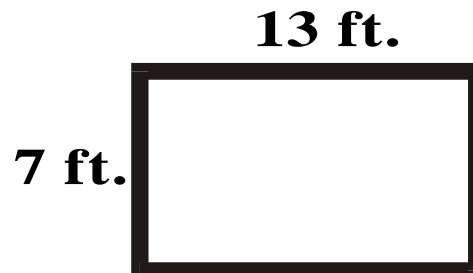
$$\begin{aligned} \text{Perimeter} &= \text{length} + \text{length} + \text{width} + \text{width} \\ &= 13 \text{ ft.} + 13 \text{ ft.} + 7 \text{ ft.} + 7 \text{ ft.} \\ &= 40 \text{ ft.} \end{aligned}$$



$$\begin{aligned} \text{Perimeter} &= \text{add up the length of all of the sides} \\ &= 11 \text{ ft.} + 5 \text{ ft.} + 12 \text{ ft.} + 3 \text{ ft.} + 6 \text{ ft.} \\ &= 37 \text{ ft.} \end{aligned}$$

Area

The **area** of an object is the number of square units necessary to cover the object. Area is measured in square inches ($in.^2$), square feet ($ft.^2$), square yards ($yd.^2$), square centimeters ($cm.^2$), etc.. To find the area of a rectangular or square-shaped object, **multiply** the length by the width.

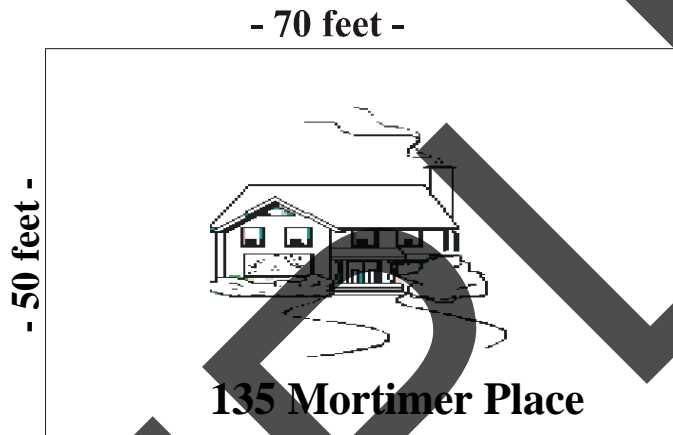


$$\begin{aligned} \text{Area} &= \text{length} \times \text{width} \\ \text{Area} &= 13 \text{ ft.} \times 7 \text{ ft.} \\ \text{Area} &= 91 \text{ ft}^2 \text{ (91 square feet)} \end{aligned}$$

LINEAR MEASURE

(Day #1)

- A.** Mrs. Smith wants to fence in her yard at 135 Mortimer Place. How many feet of fencing material does she need?



- B.** Measure this line to the nearest inch:

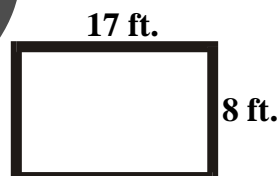


- C.** 1 foot = $\frac{?}{(12 \text{ in.} = 1 \text{ ft.})}$ inches (in.)

- D.** Which unit of measure should you use to measure the distance from Tampa, Florida to Orlando, Florida?
(inches, feet, yards, miles)

*** Read the information on finding the area of an object.

- E.** What is the area of this rectangle?

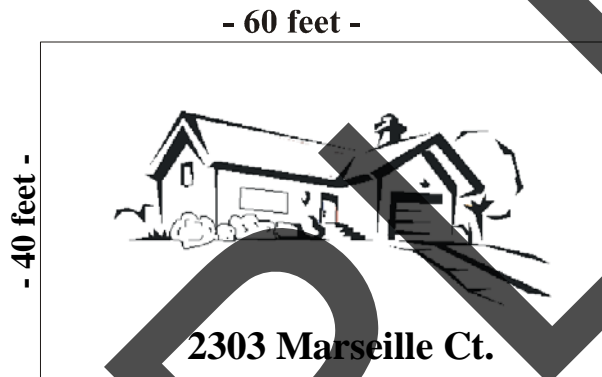


- * A, B, & C
- ** A, C, & D
- *** A, C, D, & E

LINEAR MEASURE

(Day #2)

- A.** Mr. Robinson wants to fence in his yard on 2303 Marseille Court. How many feet of fencing material does he need?



- B.** Measure this line to the nearest inch:

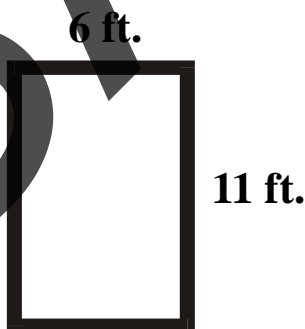


- C.** 2 foot = $\frac{?}{12 \text{ in.} = 1 \text{ ft.}}$ inches (in.)

- D.** Which unit of measure should you use to measure width of a math textbook? (*inches, feet, yards, miles*)

*** Read the information on finding the area of an object.

- E.** What is the area of this rectangle?

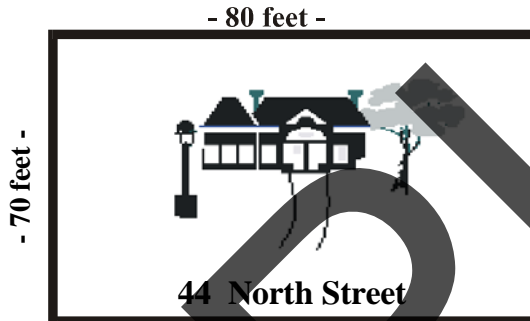


- * A, B, & D
- ** A, B, & E
- *** A, B, C, & E

LINEAR MEASURE

(Day #3)

- A.** Maxwell Harris wants to fence in his yard on 44 North Street. How many feet of fencing material does he need?



- B.** Measure this line to the nearest inch:

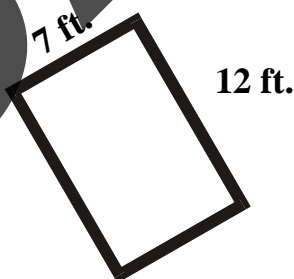


- C.** 3 foot = $\frac{?}{(12 \text{ in.} = 1 \text{ ft.})}$ inches (in.)

- D.** Which unit of measure should you use to measure width of swimming pool? (*inches, feet, yards, miles*)

*** Read the information on finding the area of an object.

- E.** What is the area of this rectangle?

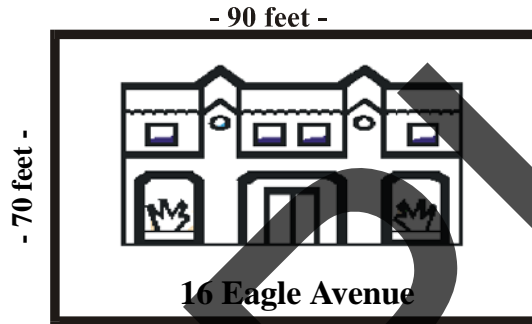


- * A, B, & C
- ** A, C, & D
- *** A, C, D, & E

LINEAR MEASURE

(Day #4)

- A.** Meg Jones wants to fence in her yard on 16 Eagle Avenue. How many feet of fencing material does she need?



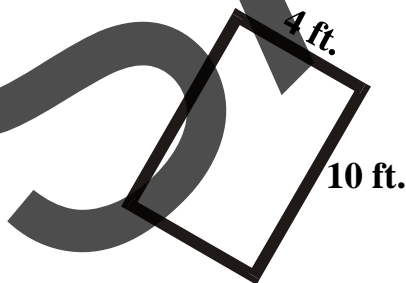
- B.** Measure this line to the nearest inch:

- C.** 4 foot = $\frac{?}{(12 \text{ in.} = 1 \text{ ft.})}$ inches (in.)

- D.** Which unit of measure should you use to measure the height of a table? (*inches, feet, yards, miles*)

*** Read the information on finding the area of an object.

- E.** What is the area of this rectangle?



- * A, B, & D
- ** A, B, & C
- *** A, B, C, & E

LINEAR MEASURE

(Day #1)

- A.** Mrs. Green owns a square-shaped lot of land at 409 Highlander Drive. She wants to fence in her yard. How many feet of fencing material does she need?



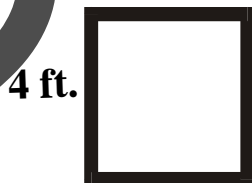
- B.** Which line is approximately 2" (inches) in length:

- I.) _____
 II.) _____
 III.) _____

- C.** 12 inches (in.) = ? foot (ft.)
 (12 in. = 1 ft.)

- D.** Which unit of measure should you use to measure the length of your thumb?
 (inches, feet, yards, miles)

- E.** What is the area of this square-shaped object?



- * A, B, & D
- ** A, B, & E
- *** A, B, D, & E

LINEAR MEASURE

(Day #2)

- A.** Mr. Eberly owns a square-shaped lot of land at 1610 Willowbrook Lane. He wants to fence in his yard. How many feet of fencing material does he need?



- B.** Which line is approximately 3" (inches) in length:

I.) _____

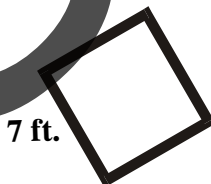
II.) _____

III.) _____

- C.** 24 inches (in.) = $\frac{?}{(12 \text{ in.} = 1 \text{ ft.})}$ feet (ft.)

- D.** Which unit of measure should you use to measure the height of a bicycle? (inches, feet, yards, miles)

- E.** What is the area of this square-shaped object?



* A, B, & C

** A, C, & D

*** A, C, D, & E

LINEAR MEASURE

(Day #3)

- A.** Mr. Popper owns a square-shaped lot of land at 33 Lefty Street. He wants to fence in his yard. How many feet of fencing material does he need?



- B.** Which line is approximately 1" (inches) in length:

I.) _____

II.) _____

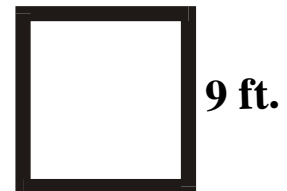
III.) _____

- C.** 36 inches (in.) = $\frac{?}{(12 \text{ in.} = 1 \text{ ft.})}$ feet (ft.)

- D.** Which unit of measure should you use to measure the length of your bedroom?

(inches, feet, yards, miles)

- E.** What is the area of this square-shaped object?

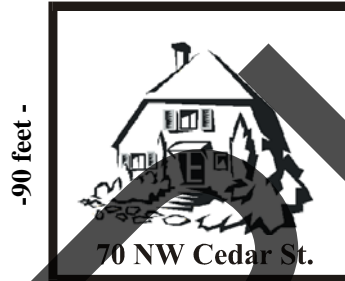


- * A, B, & D
- ** A, B, & E
- *** A, B, C, & E

LINEAR MEASURE

(Day #4)

- A.** Marty Simms owns a square-shaped lot of land at 70 NW Cedar Street. He wants to fence in his yard. How many feet of fencing material does he need?



- B.** Which line is approximately 1'' (inch) in length:

I.) _____

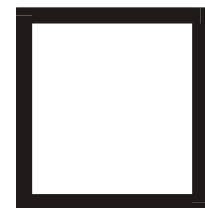
II.) _____

III.) _____

- C.** 48 inches (in.) = ? feet (ft.)
(12 in. = 1 ft.)

- D.** Which unit of measure should you use to measure the distance from Cincinnati, Ohio to St. Louis, Missouri?
(inches, feet, yards, miles)

- E.** What is the area of this square-shaped object?



5 ft.

- * A, B, & C
- ** A, C, & D
- *** A, C, D, & E