

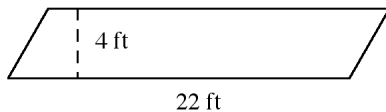
**5th Grade Chapter 9 – Measurement**

**Multiple Choice**

*Identify the letter of the choice that best completes the statement or answers the question.*

- Which measurement is the best estimate for the width of your classroom?  
**A.** 6 kilometers    **B.** 6 centimeters    **C.** 6 meters    **D.** 6 millimeters
- Which metric unit would be most appropriate to measure the length of a house?  
**A.** decimeters    **B.** kilometers    **C.** meters    **D.** centimeters
- Dennis wants to buy a piece of cloth to make a shirt. Which cloth has the greatest amount of cloth?

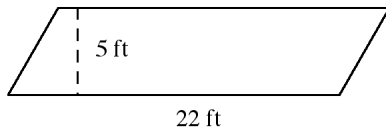
**A.**



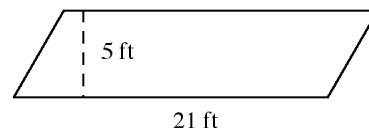
**C.**



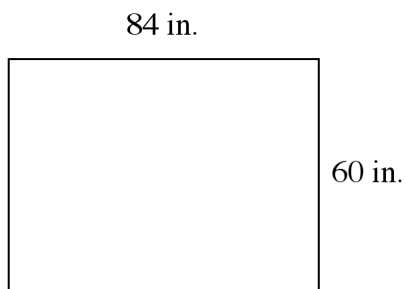
**B.**



**D.**

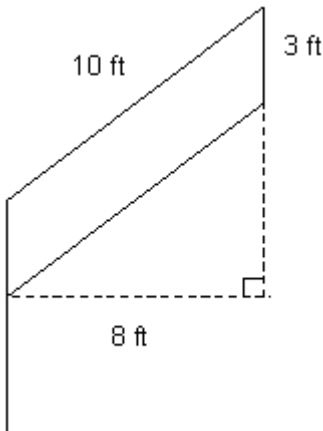


- A rectangular tablecloth measures 60 inches by 84 inches. What are the dimensions of the tablecloth in yards?



- Which of the following would you most likely use meters to measure?  
**A.** height of a doorway    **C.** distance an airplane travels  
**B.** width of a dime    **D.** length of a piece of notebook paper

6. Which of the following tells how to change a measurement from millimeters to meters?  
A. Multiply by 1,000.                      C. Multiply by 10.  
B. Divide by 1,000.                      D. Divide by 10.
7. Which of the following is the perimeter of a regular hexagon with side length 9 cm?  
A. 36 cm                                      C. 54 cm  
B. 45 cm                                      D. 72 cm
8. The area of a square is  $36 \text{ m}^2$ . Which is the length of each side?  
A. 9 m                                        C. 18 m  
B. 6 m                                        D. 12 m
9. The fabric part of the flag shown below is in the shape of a parallelogram. Which is the area of the fabric?



- A.  $30 \text{ ft}^2$                                       C.  $24 \text{ ft}^2$   
B.  $80 \text{ ft}^2$                                       D.  $26 \text{ ft}^2$
10. A triangle has an area of  $24 \text{ cm}^2$  and a base of 6 cm. Which is the height of the triangle?  
A. 2 cm                                        C. 8 cm  
B. 4 cm                                        D. 12 cm
11. Which of the following is NOT equal to 365 days?  
A. 8,760 hours                                C. 12 months  
B. 1 regular year                              D. 52 weeks

**Short Answer**

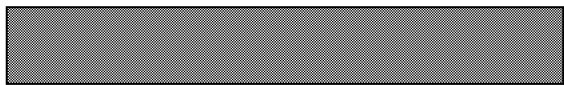
12. Four tulip poplar tree saplings were measured by volunteers at a nature reserve. The chart below shows the name of each volunteer and the height of the tree each volunteer measured.

**TULIP POPLAR TREES**

Name of Volunteer	Height of Tree
Ray	1 foot 11 inches
Kevin	40 inches
Adam	1 yard
Nicole	2 feet 8 inches

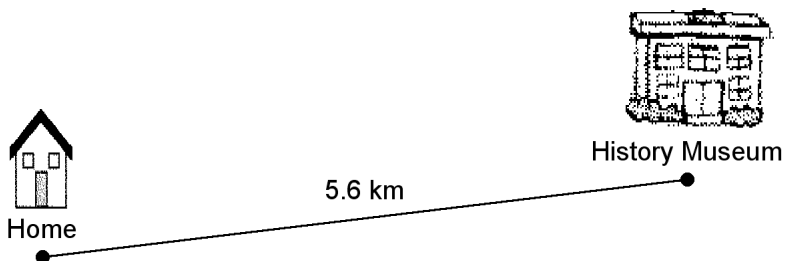
Which volunteer measured the tallest tree?

13. Vickie has a board similar to the one shown. If she cuts off 2 feet 11 inches, what is the length of the remaining board?

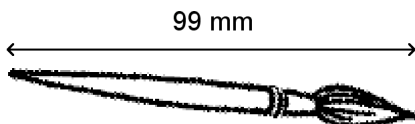


8 feet 8 inches

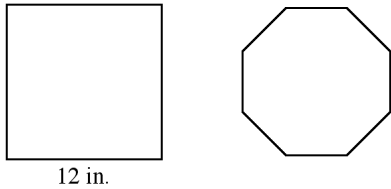
14. Mrs. Shin is traveling from her house to the history museum. How many meters will she travel to the museum?



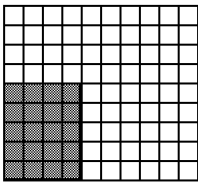
15. What is the length of the paintbrush in centimeters?



16. Victor is making party decorations. He draws and cuts out a square with sides 12 inches long. Next he draws a regular octagon with the same perimeter as the square. How long is each side of the regular octagon?

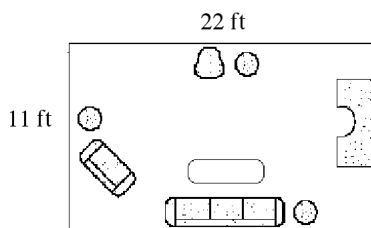


17. The shaded area represents the fountain area in a school's garden.

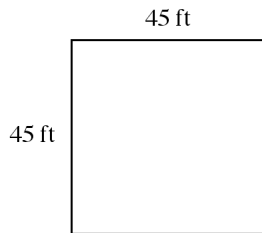


What is the perimeter of the space that is NOT the fountain area?

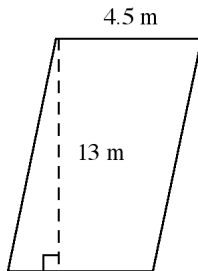
18. Charlette is buying carpet for the living room. How many square feet of carpet will she need to buy?



19. Mrs. Rice needs to purchase a square gymnastics pad for a room with the following dimensions. How many square feet of padding will she need to buy?

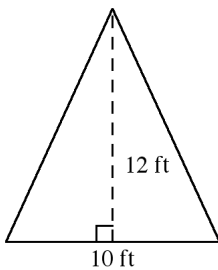


20. A flower garden is in the shape of a parallelogram.

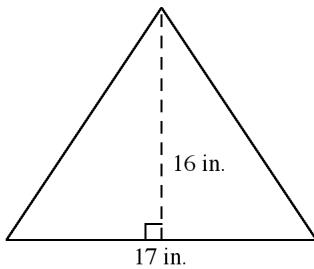


What is the area of the garden?

21. The figure below shows the shape of Mr. Morris's new foyer. What is the area of his foyer?



22. The figure below is the size of a new scarf Jenny bought. What is the area of her scarf?



Name: \_\_\_\_\_

Form A

23. Chip had 28 days of vacation starting in June. How many weeks of vacation did he have?

June						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

24. It took Mrs. Whitehead 263 minutes to drive to Knoxville. How long did she drive in hours and minutes?

## 5th Grade Chapter 9 – Measurement Answer Section

### MULTIPLE CHOICE

1. ANS: C REF: 0903 Lesson 9-3: Metric Units of Length  
OBJ: Choose the most appropriate metric unit of length, and measure lengths to the nearest centimeter and millimeter.  
TOP: Intervention K5: Using Metric Units of Length, NCTM 3-5: Meas.1.1, NCTM 3-5: Meas.1.2, NCTM 3-5: Meas.1.4 KEY: metric measurement
2. ANS: C REF: 0903 Lesson 9-3: Metric Units of Length  
OBJ: Choose the most appropriate metric unit of length, and measure lengths to the nearest centimeter and millimeter.  
TOP: Intervention K5: Using Metric Units of Length, NCTM 3-5: Meas.1.1, NCTM 3-5: Meas.1.2, NCTM 3-5: Meas.1.4 KEY: metric measurement
3. ANS: B REF: 0909 Lesson 9-9: Areas of Parallelograms  
OBJ: Find the area of a parallelogram by using a formula, and find the length when the area and other side length are known. STO: M.TE.05.07  
TOP: Intervention K28: Area, NCTM 3-5: Geom.4.5 KEY: measurement, area
4. ANS: C REF: 0901 Lesson 9-1: Customary Units of Length  
OBJ: Change between one customary unit of length and another, and add and subtract customary units of length. STO: M.UN.05.04  
TOP: Intervention K2: Using Customary Units of Length, NCTM 3-5: Meas.1.1, NCTM 3-5: Meas.1.2, NCTM 3-5: Meas.1.3 KEY: customary measurement
5. ANS: A REF: 0903 Lesson 9-3: Metric Units of Length  
OBJ: Choose the most appropriate metric unit of length, and measure lengths to the nearest centimeter and millimeter.  
TOP: Intervention K5: Using Metric Units of Length, NCTM 3-5: Meas.1.1, NCTM 3-5: Meas.1.2, NCTM 3-5: Meas.1.4 KEY: metric measurement
6. ANS: B REF: 0904 Lesson 9-4: Converting Metric Units Using Decimals  
OBJ: Change among measurements in metric units of length. STO: M.UN.05.04  
TOP: Intervention K10: Metric Units of Measurement, NCTM 3-5: Meas.1.3  
KEY: metric measurement
7. ANS: C REF: 0905 Lesson 9-5: Finding Perimeter  
OBJ: Find the perimeters of polygons. TOP: Intervention K26: Perimeter, NCTM 3-5: Geom.4.5  
KEY: measurement, perimeter
8. ANS: B REF: 0908 Lesson 9-8: Areas of Squares and Rectangles  
OBJ: Find the area of a rectangle or square by using a formula.  
TOP: Intervention K28: Area, NCTM 3-5: Geom.4.5 KEY: measurement, area
9. ANS: C REF: 0909 Lesson 9-9: Areas of Parallelograms  
OBJ: Find the area of a parallelogram by using a formula, and find the length when the area and other side length are known. STO: M.TE.05.07  
TOP: Intervention K28: Area, NCTM 3-5: Geom.4.5 KEY: measurement, area

10. ANS: C REF: 0910 Lesson 9-10: Areas of Triangles  
 OBJ: Find the area of a triangle by using a formula, and find a missing length when the area and other dimension are known. STO: M.TE.05.06  
 TOP: Intervention K29: Area, Intervention K30: Areas of Irregular Figures, NCTM 3-5: Geom.4.5  
 KEY: measurement, area
11. ANS: D REF: 0912 Lesson 9-12: Time  
 OBJ: Change from one unit of time to another. STO: M.UN.05.04  
 TOP: Intervention K14: Units of Time, NCTM 3-5: Meas.1.3 KEY: measurement, time

## SHORT ANSWER

12. ANS:  
 Kevin
- REF: 0901 Lesson 9-1: Customary Units of Length  
 OBJ: Change between one customary unit of length and another, and add and subtract customary units of length. STO: M.UN.05.04  
 TOP: Intervention K2: Using Customary Units of Length, NCTM 3-5: Meas.1.1, NCTM 3-5: Meas.1.2, NCTM 3-5: Meas.1.3  
 KEY: customary measurement, Science
13. ANS:  
 5 feet 9 inches
- REF: 0901 Lesson 9-1: Customary Units of Length  
 OBJ: Change between one customary unit of length and another, and add and subtract customary units of length. STO: M.UN.05.04  
 TOP: Intervention K2: Using Customary Units of Length, NCTM 3-5: Meas.1.1, NCTM 3-5: Meas.1.2, NCTM 3-5: Meas.1.3  
 KEY: customary measurement, subtraction, measurement
14. ANS:  
 5,600 meters
- REF: 0904 Lesson 9-4: Converting Metric Units Using Decimals  
 OBJ: Change among measurements in metric units of length. STO: M.UN.05.04  
 TOP: Intervention K10: Metric Units of Measurement, NCTM 3-5: Meas.1.3  
 KEY: metric measurement, measurement
15. ANS:  
 9.9 cm
- REF: 0904 Lesson 9-4: Converting Metric Units Using Decimals  
 OBJ: Change among measurements in metric units of length. STO: M.UN.05.04  
 TOP: Intervention K10: Metric Units of Measurement, NCTM 3-5: Meas.1.3  
 KEY: metric measurement, Visual Arts, measurement
16. ANS:  
 6 in.
- REF: 0905 Lesson 9-5: Finding Perimeter  
 OBJ: Find the perimeters of polygons. TOP: Intervention K26: Perimeter, NCTM 3-5: Geom.4.5  
 KEY: measurement, perimeter



17. ANS:  
38 units
- REF: 0905 Lesson 9-5: Finding Perimeter  
OBJ: Find the perimeters of polygons. TOP: Intervention K26: Perimeter, NCTM 3-5: Geom.4.5  
KEY: measurement, perimeter
18. ANS:  
242 ft<sup>2</sup>
- REF: 0908 Lesson 9-8: Areas of Squares and Rectangles  
OBJ: Find the area of a rectangle or square by using a formula.  
TOP: Intervention K28: Area, NCTM 3-5: Geom.4.5 KEY: measurement, area
19. ANS:  
2,025 ft<sup>2</sup>
- REF: 0908 Lesson 9-8: Areas of Squares and Rectangles  
OBJ: Find the area of a rectangle or square by using a formula.  
TOP: Intervention K28: Area, NCTM 3-5: Geom.4.5  
KEY: measurement, area, Physical Education
20. ANS:  
58.5 m<sup>2</sup>
- REF: 0909 Lesson 9-9: Areas of Parallelograms  
OBJ: Find the area of a parallelogram by using a formula, and find the length when the area and other side length are known. STO: M.TE.05.07  
TOP: Intervention K28: Area, NCTM 3-5: Geom.4.5 KEY: measurement, area
21. ANS:  
60 ft<sup>2</sup>
- REF: 0910 Lesson 9-10: Areas of Triangles  
OBJ: Find the area of a triangle by using a formula, and find a missing length when the area and other dimension are known. STO: M.TE.05.06  
TOP: Intervention K29: Area, Intervention K30: Areas of Irregular Figures, NCTM 3-5: Geom.4.5  
KEY: measurement, area
22. ANS:  
136 in.<sup>2</sup>
- REF: 0910 Lesson 9-10: Areas of Triangles  
OBJ: Find the area of a triangle by using a formula, and find a missing length when the area and other dimension are known. STO: M.TE.05.06  
TOP: Intervention K29: Area, Intervention K30: Areas of Irregular Figures, NCTM 3-5: Geom.4.5  
KEY: measurement, area
23. ANS:  
4 weeks
- REF: 0912 Lesson 9-12: Time OBJ: Change from one unit of time to another.  
STO: M.UN.05.04  
TOP: Intervention K14: Units of Time, NCTM 3-5: Meas.1.3 KEY: measurement, time

**24.** ANS:  
4 hours 23 minutes

REF: 0912 Lesson 9-12: Time

OBJ: Change from one unit of time to another.

STO: M.UN.05.04

TOP: Intervention K14: Units of Time, NCTM 3-5: Meas.1.3

KEY: measurement, time