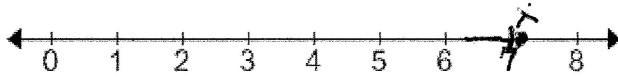Version A

23. What is $\sqrt[3]{27}$?

 A. 3
 B. 4.5
 C. 14.5
 D. 9

24. Which value best represents point X on the number line below?

 A. $\sqrt{13}$
 B. $\sqrt{36}$
 C. $\sqrt{43}$
 D. $\sqrt{50}$

25. Compare.

π ▢ 3.1

 A. =
 B. +
 C. <
 D. >

26. Which of the following inequalities is not true?
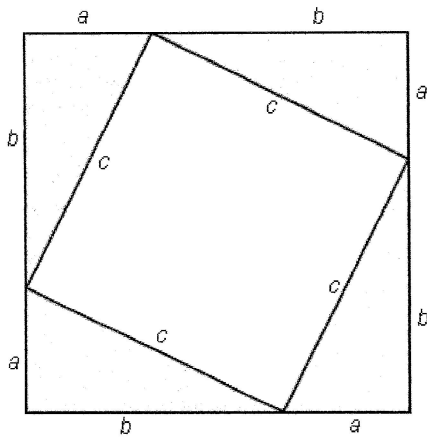
 A. $\sqrt{99} < 10.5$ B. $\sqrt{50} > 7$

 C. $\pi^2 > 9.2$ D. $\dfrac{\pi}{3} < 0.9$

27. Use the diagram to complete the third step in the proof of the Pythagorean Theorem below.

Step 1: The area of the center square is c^2.

Step 2: The area of each individual triangle is $\frac{1}{2}ab$.

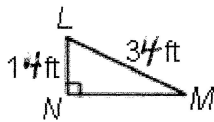Step 3: The combined area of the four triangles is _____
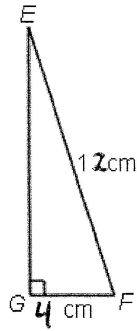
A. $4ab$

B. $\frac{1}{4}ab$

C. $2ab$

D. $2a^2b^2$

28. Find the length of $\overline{MN}$. Round to the nearest tenth of a foot.

29.   Find the length of $\overline{EG}$. Round to the nearest tenth of a centimeter.

30.   Kenny wants to put lights around his roof to decorate for a party he is having. If he has found the length of the two shorter sides to be 15 feet long, how long does the strand of lights need to be for the third side? Round to the nearest tenth of a foot.
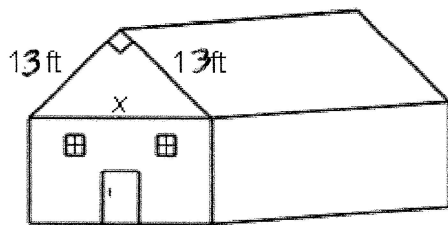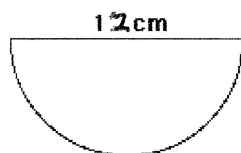

31.   What is the distance between the points (3, 8) and (-1, 6)?

32.   What is the distance between the points (-2, -5) and (6, -9)? Round the answer to the nearest tenth if necessary.

33.   Find the distance between the points (2, -8) and (8, -5). Round the answer to the nearest tenth if necessary.

34.   What is the area of the semicircle?

12cm

Round your answer to the nearest hundredth.

35.   LaShonda wants to cover her circular pool for the winter. The diameter of the pool is 19 ft. How large should the covering be in order to cover the top of the pool? (Use $\pi = 3.14$ and round to the nearest whole number.)


19 ft
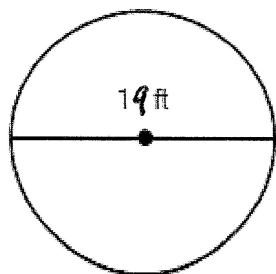
36.   The signal from a radio tower in Green Fades to Gold National Park
creates a circular region that reaches a distance of 500 yards from the
base of the tower. How much area does the signal cover? Use 3.14 for π.

37.   A rectangular garden is divided in half along the diagonal. One of the triangular regions formed is planted in
red roses, and the other region is planted in yellow roses. What is the area of the region planted in red roses
if the length of the garden is 40 ft and the width is 18 ft?   t

40 ft

Red Roses   18 ft

Yellow Roses
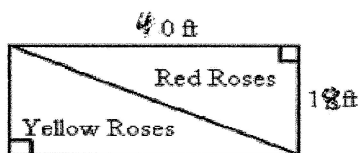
38.   A guy wire anchors a telephone pole to the ground so that the wind cannot blow the pole down. What is the area of the triangle formed by the pole, ground, and guy wire?
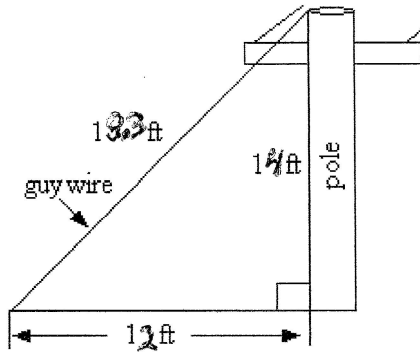
39.   A window is in the shape of a triangle. The base of the window is 5 feet long. The height of the window is 7.6 feet long. Find the area of the window.