

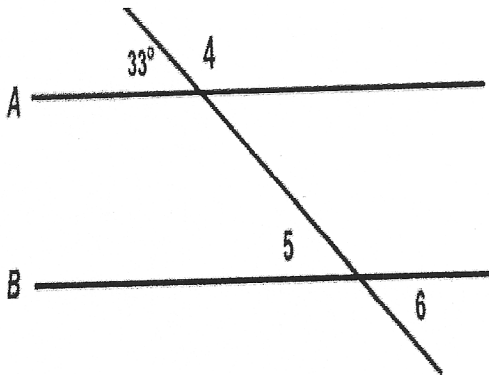
# Unit 4 Take Home and Check

**A = Basic**

**B = Moderate**

**C = Challenging**

**A**



- 1) What is the measure of angle 5? Why?
- 2) What is the measure of angle 6? Why?
- 3) What is the measure of angle 4? Why?

**A**

**True or False?? If false explain why.**

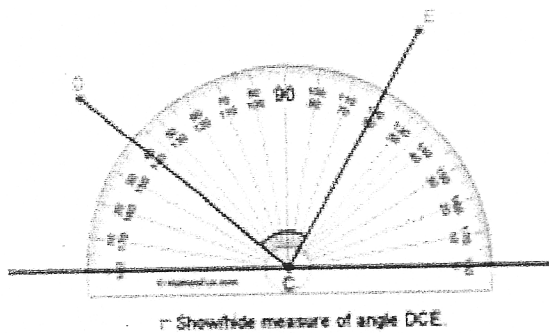
- 4) A regular hexagon always has six congruent sides.
- 5) The angles of a triangle sum to  $180^\circ$ .

A

- 6) A triangle with angles  $110^\circ$ ,  $30^\circ$ , and  $40^\circ$  is isosceles.
- 7) A triangle with sides 30, 40, and 50 ft. is scalene.
- 8) A rhombus is a type of square.
- 9) A parallelogram has four sides and four congruent sides.
- 10) The area of a parallelogram with base of 10 feet and height of 2 ft. is 20 square feet.
- 11) The base of a triangle with area of 36 square cm and height of 4 cm is 16 cm.

A

- 12) What is the measure of the angle below?



**A**

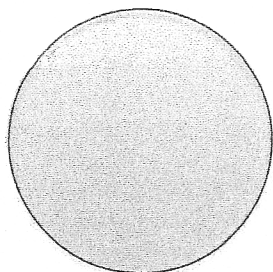
13) Find the circumference of a circle with a radius of 5 inches.

**A**

14) Find the area of a circle with a diameter of 6 feet.

**B**

Below is an illustration of a round flower garden. Use the illustration of the garden circle to solve problems 15 and 16. The area of the flower garden circle is 2,640 feet squared. Show all of your work.



15) What is the diameter of the garden?

16) What is the circumference of the garden circle?  
(Use your answer from #12 if needed)

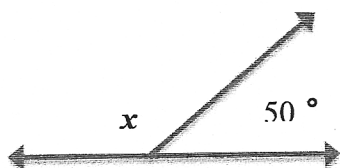
**B**

17) A swimming pool is 8 m long, 6 m wide and 1.5 meters deep. The water resistant paint needed for the pool costs \$6 per square meter.

- a. How much will it cost to paint the interior surfaces of the pool?
- b. How many liters of water will be needed to fill it?

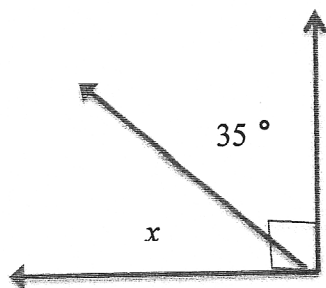
**A**

18) Give the measurement of angle measurement of angle  $x$ . Explain how you got it. (no protractor!)



**A**

19) Give the measurement of angle  $x$ . Explain how you got it. (no protractor!)



A

Label each solid below:

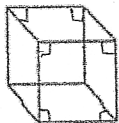
20) \_\_\_\_\_



21) \_\_\_\_\_



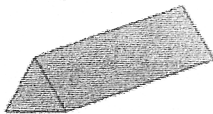
22) \_\_\_\_\_



23) \_\_\_\_\_



24) \_\_\_\_\_



25) \_\_\_\_\_



26) \_\_\_\_\_



27) \_\_\_\_\_



28) \_\_\_\_\_



29) \_\_\_\_\_



A

30) How many faces, edges, and vertices does ~~the~~ rectangular prism have?

**A**

31) How many faces, edges, vertices does #22 have?

**A**

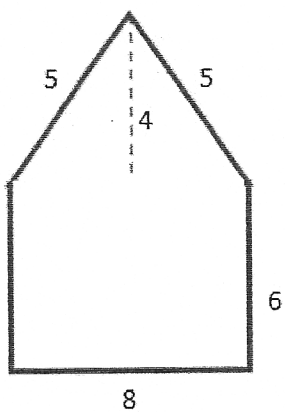
32) Describe the vertical cross section of #21.

**A**

33) Describe the horizontal cross of section of #24.

**C**

34) Find the area of the following composite figure.



**B**

35) A square has an area of  $225 \text{ cm}^2$  what is the perimeter?

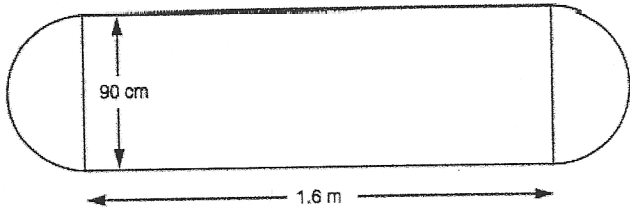
**A**

36) A rectangular back yard has a length of 90 yd. and an area of  $4500 \text{ yd}^2$ . What is the width?

**B**

37)

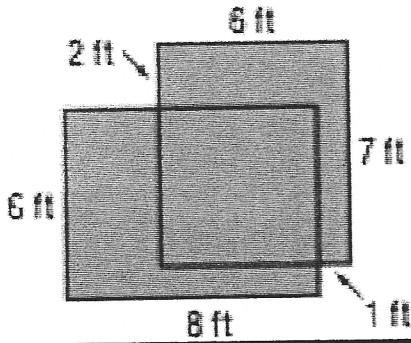
Find the surface area of the shape below, using  $\pi = 3.142$ .



Change meters to centimeters ( $\times 100$ )

**C**

38) Find the area of the figure below.



**B**

39) Find the area of the figure below.

