Name $\qquad$
Date__Pd $\qquad$
State if the three numbers can be the measures of the sides of a triangle.

1) $7,5,4$
2) $3,6,2$
3) 5, 2, 4
4) $8,2,8$

Two sides of a triangle have the following measures. Find the range of possible measures for the third side.
5) 9,5
6) 5,8
7) 6,10
8) 6,9
9) If an isosceles triangle has only one 80 degree angle, what must be the measures of the other 2 angles? (Draw a picture if it helps)
10) Name the cross-sections for the following three-dimensional figures.

| Figure | Parallel to the base | Perpendicular to the base |
| :--- | :--- | :--- |
| Rectangular prism |  |  |
| Triangular prism |  |  |
| Sphere |  |  |
| Cylinder |  |  |
| Cone |  |  |
| Rectangular pyramid |  |  |
| Triangular pyramid |  |  |

11) What is the relationship between the circumference of every circle to its diameter?
12) A tire on a bicycle rolled a certain distance. If the radius of the tire is 2 ft . and the tire made 3 revolutions, how far did the bike travel? (Use 3.14 for pi)
13) There is a circular fountain in the park with a diameter of 10 feet. The city would like to place a fence around it that is 6 feet from the edge of the fountain. How long should the fence be?(use 3.14 for pi)
14) If the diameter of a circle is 12 m , what is the circle's area?

Solve for x and all of the angle measures.
15)

16)

17)


19) Jamie's mom wants to wrap this gift for a birthday party. How much wrapping paper will she need to cover the gift?


11 cm
20) What is the volume of this right triangular prism?


What is the area of the triangular base?

21)

Find the area of this figure.

