**Math 7** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
**Unit 4: Geometry** Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
**STUDY GUIDE**

**Knowledge and Understanding**

1. What is the circumference of a circle?
2. What is the diameter of a circle?
3. Explain the difference between the radius and diameter of a circle.
4. **Draw a circle and label its parts.**
5. Find the measure of angle 1:

127

1. Can you have a triangle with 3 sides measuring 12 cm, 4 cm, and 8cm? **Explain**.



 **For #7 – 10 solve for the missing angle.**

1. 

3x-1

X +15

1. 

4x + 8

4x



1. 

4X

80

20

1. In the triangle shown, the measure of  is 35 degrees, the measure of is 120 degrees, and the measure of is 25 degrees. **What is the measure of**?

Hint: Label all the angle measures as you find them.



1. Find the **area** of the triangle below.



32.5 inches

15 inches

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A. | 49.5 in  | B. | 80 in2 | C. | 60 in2 | D. | 172 in2 |

1. Find the area of the given figure (round to the nearest whole number):

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A. | 525 cm² | B. | 100 cm² | C. | 400 cm² | D. | 500 cm² |
|  |  |  |  |  |  |  |  |



16

25 CM

***Questions 19 -21 :Can these be triangles? Identify as Isosceles, Scalene or Equilateral***

1. Side=12” side=12” side=36”\_\_\_\_\_\_\_\_\_\_\_\_ TYPE OF TRIANGLE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Side=14” side=12” side=15”\_\_\_\_\_\_\_\_\_\_\_\_ TYPE OF TRIANGLE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Side=19” side=19” side=5” \_\_\_\_\_\_\_\_\_\_\_\_ TYPE OF TRIANGLE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Questions 22-24 Can these be triangles? Identify as Right, Acute or Obtuse***

1.  120 ⁰ 60 ⁰ 10⁰ \_\_\_\_\_\_\_\_\_\_ TYPE OF TRIANGLE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 94 ⁰ 36 ⁰ 50 ⁰ \_\_\_\_\_\_\_\_\_\_ TYPE OF TRIANGLE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 45 ⁰ 35 ⁰ 90⁰ \_\_\_\_\_\_\_\_\_\_ TYPE OF TRIANGLE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Find the **circumference** of a circle with the diameter of 5.6 inches. Use 3.14 for π. Round to the nearest tenths if necessary. **Draw a picture to go with your work!**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Find the **area** of a circle with the diameter of 18 feet. Use 3.14 for π. Round to the nearest tenths if necessary. **Draw a picture to go with your work!**

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