

Geometry

Name: Key

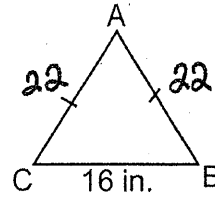
Review for 1st Semester Final Exam (Take Home)

1. Given: $\triangle ABC \cong \triangle RST$ and $\triangle ABC$ is equiangular. Find $m\angle T = 60^\circ$

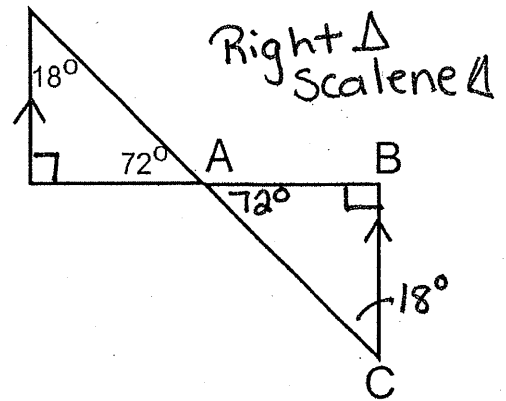
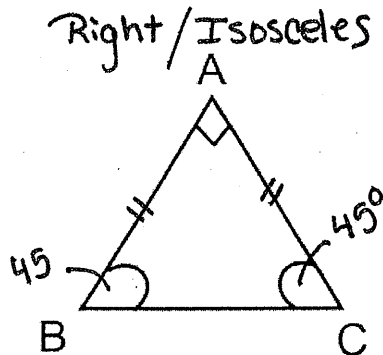
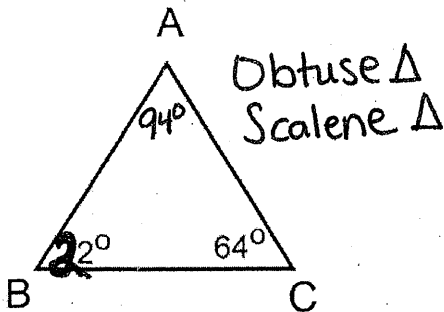
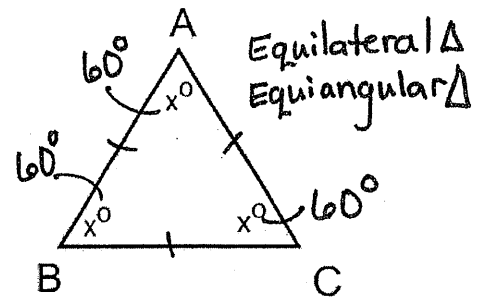
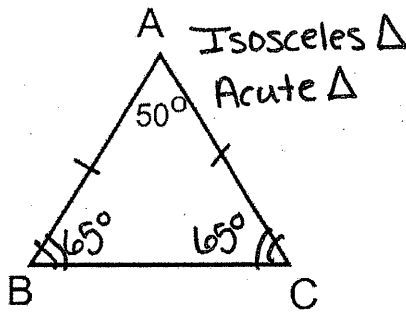
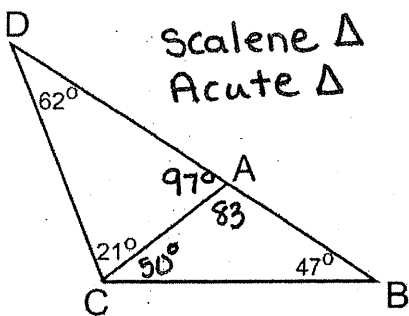
$\angle C \cong \angle T$ $m\angle C = 60^\circ$ so $m\angle T = 60^\circ$

2. Given: $\triangle ABC \cong \triangle RST$ and the perimeter of $\triangle ABC$ is 60. Find TR .

$\overline{AC} \cong \overline{RT}$ $AC = 22$ so $TR = 22 \text{ in}$



3. For each triangle, fill in the measures / congruencies of as many angles / segments as possible. Then, classify $\triangle ABC$ by its angle measures AND its side lengths. (i.e. Give 2 names for each triangle.)



4. Find the area and circumference of a circle with radius 15 meters in terms of π .

$A = \pi(15)^2$ $A = 225\pi \text{ meters}^2$ | $C = 2\pi(15)$ $C = 30\pi \text{ meters}$

5. Complete each conjecture.

a) The product of two odd numbers is odd.

b) The product of two negative numbers is positive.

c) The sum of two even numbers is even.

d) The quotient of two negative numbers is positive.

e) The quotient of two positive numbers is positive.

examples

$3 \cdot 5 = 15$

$-4 \cdot -5 = +20$

$6 + 8 = 14$

$-8 / -4 = +2$

$6 / 3 = +2$