Name $\qquad$ Date $\qquad$

1. Decide if each shape has any lines of symmetry. If it does, write how many, if it doesn't write "none"
a.

b.

c.

d.

e.

f.

g. For each triangle listed below, state whether it is acute, obtuse, or right and whether it is isosceles, equilateral, or scalene.

Triangle a: $\qquad$
$\qquad$

Triangle c: $\qquad$
$\qquad$

Triangle e: $\qquad$
$\qquad$
h. How many lines of symmetry does a circle have? What point do all lines of symmetry for a given circle have in common?

$\qquad$
$\qquad$
$\qquad$
$\qquad$
2. In the following figure, QRST is a rectangle. Without using a protractor, determine the measure of $\angle R Q S$. Write an equation that could be used to solve the problem.


For each part below, explain how the measure of the unknown angle can be found without using a protractor.
a. Find the measure of $\angle \mathrm{D}$.

b. In this figure, $\mathrm{Q}, \mathrm{R}$, and S lie on a line. Find the measure of $\angle Q R T$.


