## GEOMETRY 6: QUADRILATERALS

1. Given the quadrilateral $A B C D$ :
a. name the angle opposite $\angle \mathrm{D}$
b. name the side opposite $\overline{\mathrm{BC}}$
c. name two angles consecutive to $\angle \mathrm{D}$
d. name two sides adjacent to $\overline{\mathrm{AB}}$
e. $\angle \mathrm{A}+\angle \mathrm{B}+\angle \mathrm{C}+\angle \mathrm{D}=$

2. Identify the following as trapezoids ( $T$ ), parallelograms ( P ), rectangles (Rec), rhombuses (Rh) or squares ( $(S)$. Recall that many of these figures have more than one name.
a.

b.

c.

d.

e.

g.

h.

f.

i.

3. In each of the following, identify the type of quadrilateral shown. Also find the indicated angles and sides. Do not use a protractor.
a.

b.

$A B C D$ is a $\qquad$ .

EFGH is a $\qquad$ .
$\angle C=$ $\qquad$ $\overline{\mathrm{AC}}=$ $\qquad$
$\angle \mathrm{G}$ $\qquad$ $\angle \mathrm{H}=$ $\qquad$
$\angle \mathrm{F}=$ $\qquad$
$\overline{\mathrm{GH}}=$ $\qquad$ $\overline{\mathrm{FH}}=$ $\qquad$
c.

d.


IJKL is a $\qquad$ MNOP is a $\qquad$
$\angle I=$ $\qquad$ $\angle \mathrm{L}=$ $\qquad$
$\angle \mathrm{M}=$ $\qquad$ $\angle \mathrm{P}=$ $\qquad$
$\angle \mathrm{K}=$ $\qquad$
$\overline{\mathrm{IL}}=$ $\qquad$ $\overline{\mathrm{KL}}$ $\qquad$ $\overline{\mathrm{PM}}=$ $\qquad$ $\overline{\mathrm{MN}}=$
e.


QRST is a $\qquad$ .

The four interior angles each measure $\qquad$ .

Each side measures $\qquad$ .

## ANSWER KEY

1. a. $\angle B$
b. $\overline{\mathrm{AD}}$
c. $\angle \mathrm{A}$ and $\angle \mathrm{C}$
d. $\overline{\mathrm{AD}}$ and $\overline{\mathrm{BC}}$
e. $360^{\circ}$
2. a. $P$
b. $P$
c. T
d. Rh, P
e. $S, R h, P$
f. Rh, $P$
g. Rec, P
h. Rec, P
i. $P$
3. a. trapezoid $118^{\circ}, 8 \mathrm{~cm}$
b. rectangle $90^{\circ}, 90^{\circ}, 90^{\circ}, 10 \mathrm{~cm}, 3 \mathrm{~cm}$
c. rhombus $35^{\circ}, 145^{\circ}, 35^{\circ}, 6 \mathrm{~m}, 6 \mathrm{~m}$
d. parallelogram $33^{\circ}, 247^{\circ}, 5 \mathrm{~mm}, 4 \mathrm{~mm}$
e. square $90^{\circ}, 16 \mathrm{~km}$
