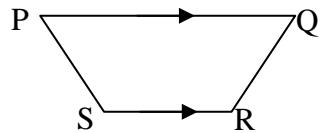


Geometry
Worksheet: Trapezoids & Kites

Name _____
Date _____ Period ____

PQRS is an isosceles trapezoid

1) Name the bases of trapezoid PQRS. _____



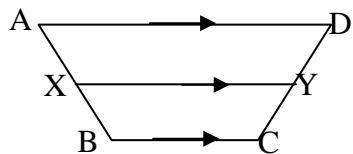
2) Name the legs of trapezoid PQRS. _____

3) Name two pairs of congruent angles. _____ \cong _____, _____ \cong _____

4) Name a pair of congruent segments. _____ \cong _____

Isosceles trapezoid ABCD. \overline{XY} is a midsegment

5) If $AX = 4$, then $CD =$ _____



6) If $m\angle ABC = 110^\circ$, then $m\angle BAD =$ _____

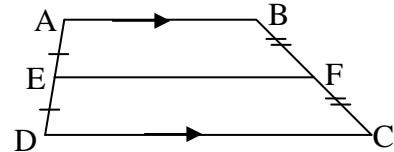
7) If $m\angle BAD = 65^\circ$, then $m\angle CDA =$ _____

8) If $m\angle DCB = 105^\circ$, then $m\angle DAB =$ _____

Trapezoid ABCD. Show all work. \overline{EF} is a midsegment

9) $m\angle B$ is three times $m\angle C$. Find $m\angle B$ and $m\angle C$.

(Hint: Let $m\angle C = x^\circ$)

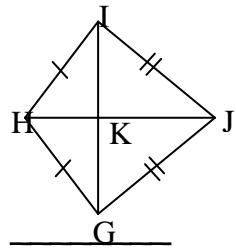


10) If $m\angle A = (2x)^\circ$, $m\angle D = (x - 12)^\circ$, $m\angle B = y^\circ$ and $m\angle C = (y - 70)^\circ$, find measures of all four angles.

Kite $GHIJ$. (True or False)

11) $m\angle GKJ = 90^\circ$ _____

12) $\overline{HJ} \cong \overline{IG}$ _____



13) $\angle HIJ \cong \angle HGJ$ _____

14) \overline{HJ} and \overline{IG} bisect each other. _____

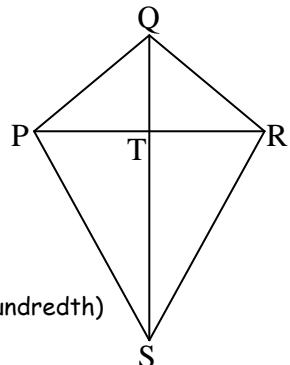
15) $\angle IHG \cong \angle IJG$ _____

16) \overline{HJ} bisects \overline{IG} . _____

Refer to kite $PQRS$ with $PQ = QR = 10$, $PR = 16$, $RS = 12$.

17) $TR =$ _____

18) $QT =$ _____



19) $TS =$ _____ (Simplest Radical form)

20) $QS =$ _____ (rounded to nearest hundredth)

21) If $m\angle QRT = 40^\circ$, then $m\angle PQR =$ _____.

22) If $m\angle PSR = 30^\circ$, then $m\angle TRS =$ _____.

Refer to kite $WXYZ$.

23) $m\angle VYZ =$ _____

24) $m\angle XWZ =$ _____

25) $m\angle VXY =$ _____

26) $m\angle WXY =$ _____

27) $m\angle WZY =$ _____

