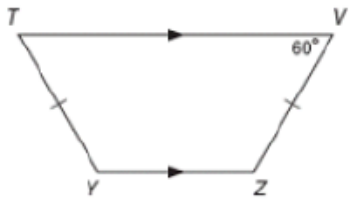
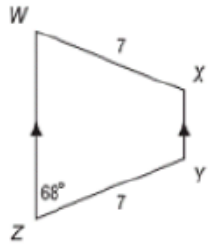
Name _____ Date _____

Find each measure.

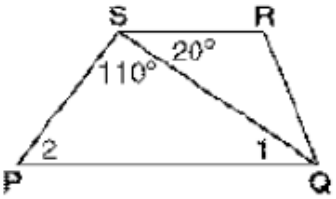
1) $m\angle T$



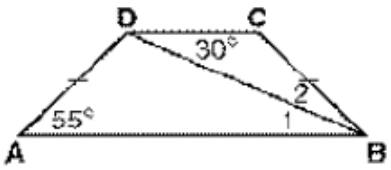
2) $m\angle Y$



3) Trapezoid PQRS. Find the m∠1 and ∠2.

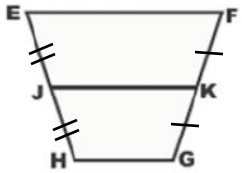


4) ABCD is an isosceles trapezoid. Find the m∠1 and ∠2.

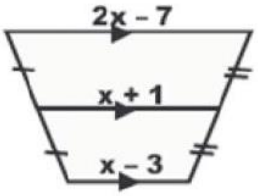


5) MATH is an isosceles trapezoid with $\overline{AT} \parallel \overline{MH}$. If $m\angle M = 3x - 9$ and $m\angle H = x + 3$ find x.

6) If EH=FG, and $m\angle E = 65$, then what is $m\angle G$ and $m\angle GKJ$?



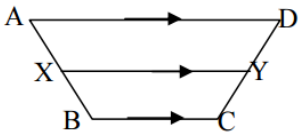
7) Find the value of x.



Use the diagram of Isosceles trapezoid ABCD. $\overline{XY}$ is the midsegment. Explain your reasoning.

8) If AX=4, then CD= ____.

9) If $m\angle ABC = 110$, then $m\angle BAD$ =_____.



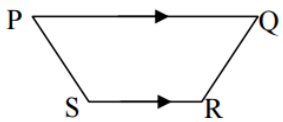
10) If $m\angle BAD = 65$, then $m\angle CDA$ =_____.

11) If $m\angle DCB = 105$, then $m\angle DAB$ =____.

PQRS is an isosceles trapezoid.

12) Name the bases

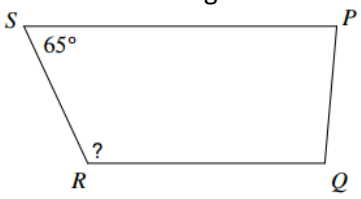
13) Name the legs

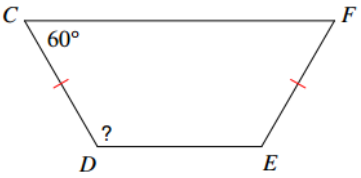


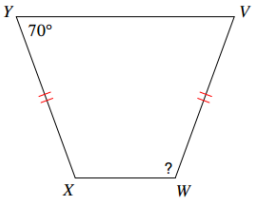
14) Name two pairs of congruent angles

15) Name a pair of congruent segments

Find the indicated angle measurement. Explain your reasoning.

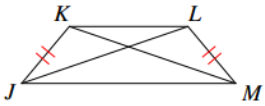
16) 

17) 

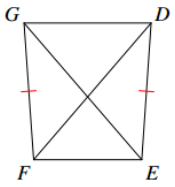
18) 

Find the length indicated for each trapezoid. Explain your reasoning.

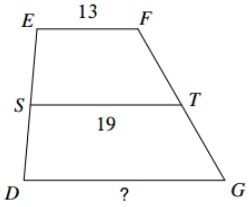
19) $KM = 22$
Find JL

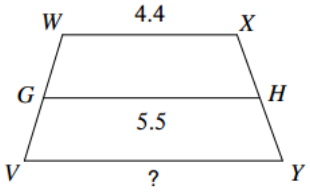


20) $DF = 8.7$
Find EG

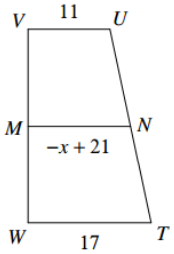


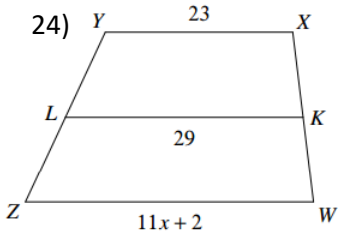
Find the length of the base indicated for each trapezoid.

21) 

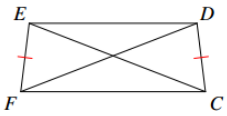
22) 

Solve for x. Each figure is a trapezoid.

23) 

24) 

25) $EC = 20$
$FD = 5x - 10$



26) A given trapezoid has one base that measures x^2, a second base that measures 34, and a midsegment that measures 10x – 1. Find x.

27) Classify the quadrilateral defined by points: W(-1, 2), X(3, 0), Y(4, -3), Z(-4, 1)