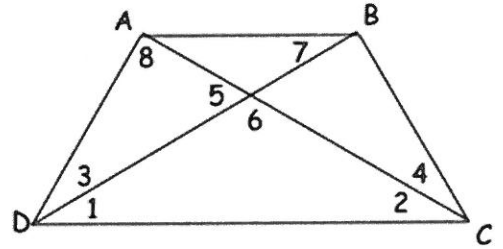


Name: _____

7.5 Practice Problems

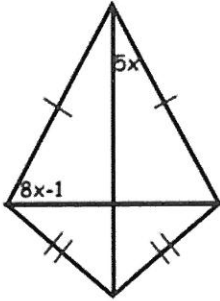
1. Given: Isosceles trapezoid ABCD, $m\angle BAC = 30^\circ$ and $m\angle DBC = 85^\circ$

- $m\angle 1 =$ _____ $m\angle 5 =$ _____ $m\angle ADC =$ _____
 $m\angle 2 =$ _____ $m\angle 6 =$ _____ $m\angle BCD =$ _____
 $m\angle 3 =$ _____ $m\angle 7 =$ _____ $m\angle DAB =$ _____
 $m\angle 4 =$ _____ $m\angle 8 =$ _____ $m\angle CBA =$ _____



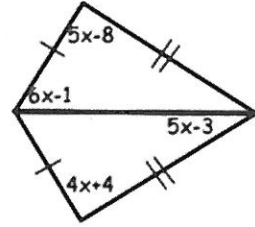
2. Find x.

$x =$ _____



3. Find x

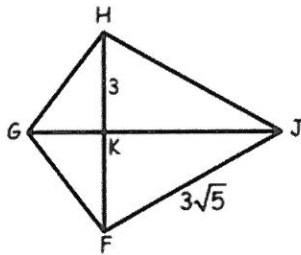
$x =$ _____



4. Kite FGHJ

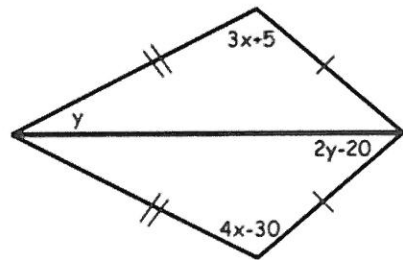
KF = _____

KJ = _____



5. $x =$ _____

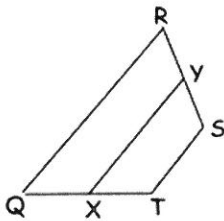
$y =$ _____



\overline{XY} is the median of trapezoid QRST in problems 6-11.

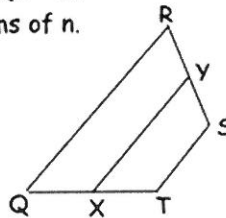
6. $XY=18$ and $TS = 7$.

Find QR.

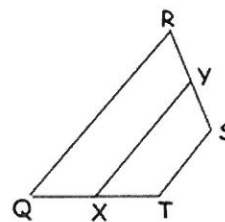


7. $TS = n$ and $QR = 6$.

Find XY in terms of n.

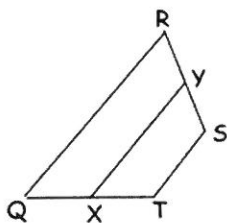


8. $XY=16$. Find $TS+QR$.



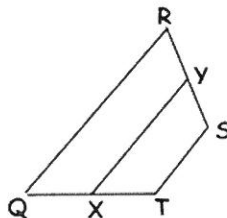
9. $TX = \frac{1}{2}(SR)$ and $m\angle T=130$.

Find $m\angle R$.



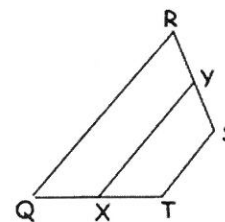
10. $ST = a$ and $QR = 2b$.

Find XY.



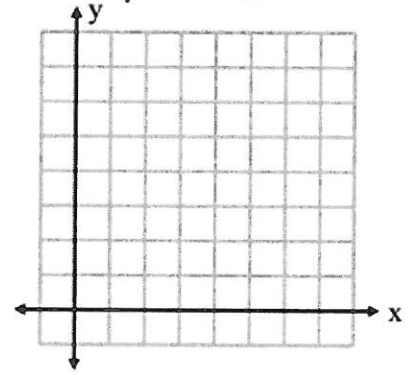
11. $QX=SY$ and $m\angle TXY = 45$.

Find $m\angle R$.

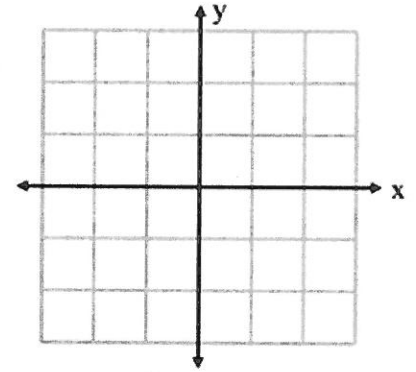


Graph and label each quadrilateral with the given vertices. Then determine the most precise name for each quadrilateral. Explain why you chose the name you did. Show work to support the explanations.

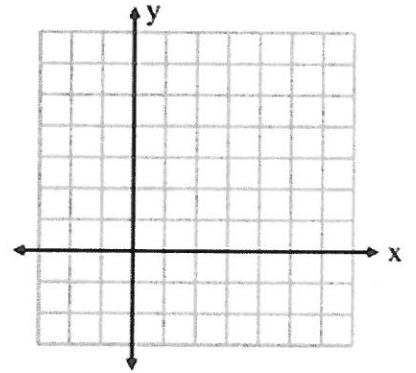
12. $A(3,5)$, $B(7,6)$, $C(6,2)$, $D(2,1)$



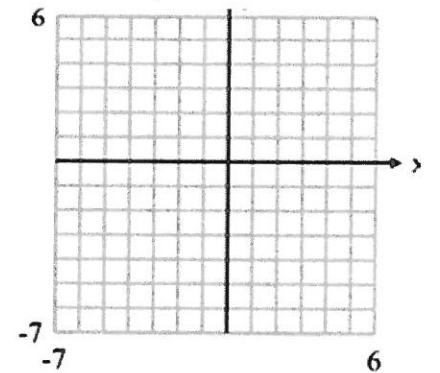
13. $W(-1,1)$, $X(0,2)$, $Y(1,1)$, $Z(0,-2)$



14. $J(2,1)$, $K(5,4)$, $L(7,2)$, $M(2,-3)$



15. $E(-3,1)$, $F(-7,-3)$, $G(6,-3)$, $H(2,1)$



16. **ATTENDING TO PRECISION** In trapezoid $PQRS$, $\overline{PQ} \parallel \overline{RS}$ and \overline{MN} is the midsegment of $PQRS$. If $RS = 5 \cdot PQ$, what is the ratio of MN to RS ?

(A) 3 : 5

(B) 5 : 3

(C) 1 : 2

(D) 3 : 1