

Geometry DAY 3.9
Putting It All Together

Name: Key

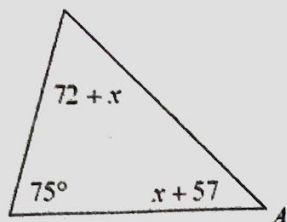
Date: _____

SHOW ALL OF THE NECESSARY WORK FOR FULL CREDIT!

1. $x = -12$

$m\angle A = 45^\circ$

$-12 + 57$



$72 + x + 75 + x + 57 = 180$

$2x + 204 = 180$

$2x = -24$

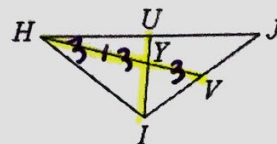
$x = -12$

2. $YV = 3$

$HV = 9$

HV and UI are medians.

Find HV if HY = 6

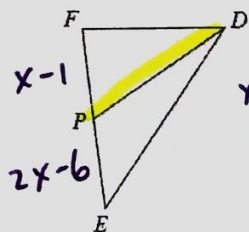


3. $x = 5$

PD is a median.

Find x if $PE = 2x - 6$ and $PF = x - 1$

$FE = 8$



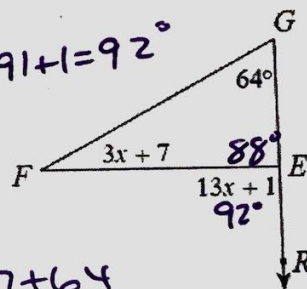
$5 - 1 = 4$
 $2(5) - 6 = 10 - 6 = 4$

$x - 1 = 2x - 6$
 $5 = x$

4. $x = 7$

$m\angle FER = (3(7) + 1) + 1 = 91 + 1 = 92^\circ$

$m\angle FEG = 88^\circ$
 $180 - 92^\circ$



$13x + 1 = 3x + 7 + 64$

$13x + 1 = 3x + 71$

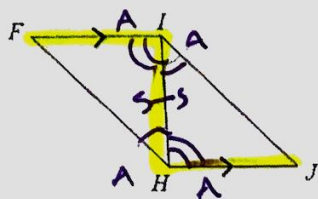
$10x = 70$

$x = 7$

Circle whether the triangles are congruent or not. If they are congruent, state the reason why.

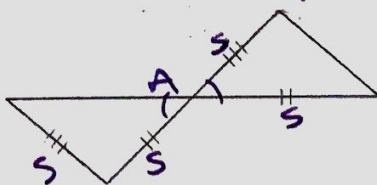
5. Congruent? YES or NO

Why? ASA



6. Congruent? YES or NO

Why? Not Congruent



7. Congruent? YES or NO

Why? AAS

