Day 07 HW: Skills Practice Worksheet

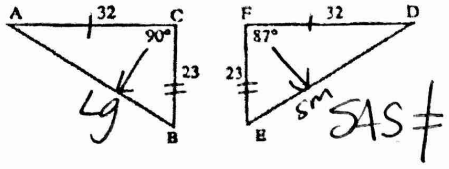
Inequalities in Two Triangles Practice

Name: Master G

Date: _____ **Block:** G

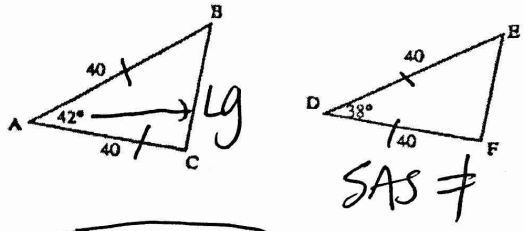
What can you conclude about the segment lengths in each pair of triangles (choose the best answer)?

1.



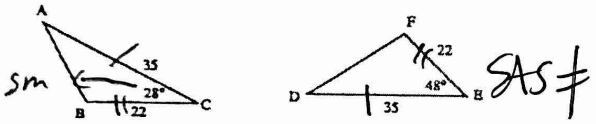
A. AB > DE
B. AB < DE
C. AB = DE
D. not enough info

2.



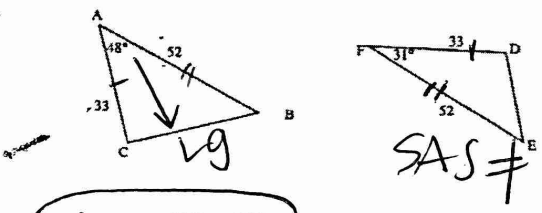
A. BC > EF
B. BC < EF
C. BC = EF
D. not enough info

3.



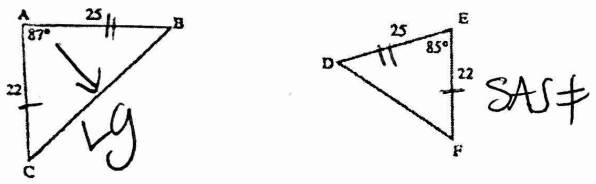
A. AB > DF
B. AB < DF
C. AB = DF
D. not enough info

4.



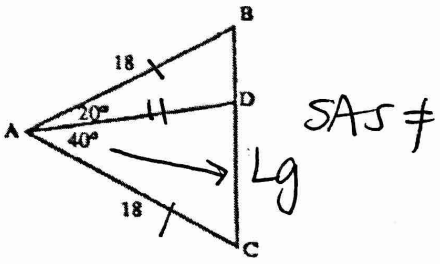
A. BC > ED
B. BC < ED
C. BC = ED
D. not enough info

5.



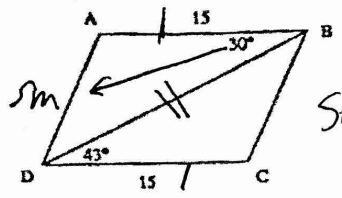
A. CB > DF
B. CB < DF
C. CB = DF
D. not enough info

6.



A. BD > DC
B. BD < DC
C. BD = DC
D. not enough info

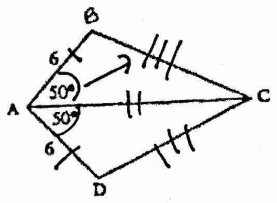
7.



SAS ≠

A. AD > BC
B. AD < BC
C. AD = BC
D. not enough info

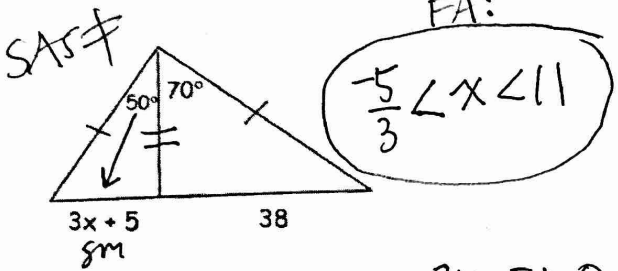
8.



△s are ≅ by SAS

A. BC > DC
B. BC < DC
C. BC = DC
D. not enough info

9. Find the range of values for x.



SAS ≠

FA:

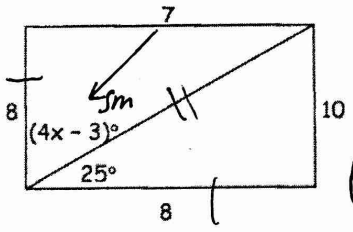
$-\frac{5}{3} < x < 11$

$3x+5 < 38$
$3x < 33$
$x < 11$

$3x+5 > 0$
$3x > -5$
$x > -\frac{5}{3}$

but you can't have a negative side length, so

10. Find the range of values for x.



SSS ≠

FA:

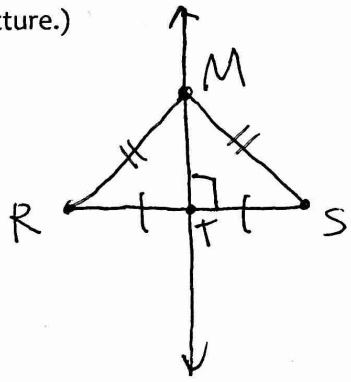
$\frac{3}{4} < x < 7$

$4x-3 < 25$
$4x < 28$
$x < 7$

$4x-3 > 0$
$4x > 3$
$x > \frac{3}{4}$

but you can't have a negative, so

11. If M is on the ⊥ bisector of $\overline{RS}$, then M is equidistant from R and S which would make $\overline{MT} \cong \overline{TS}$. (Hint: draw a picture.)



12. If T is on the ∠ bisector of ∠CAR, the T is equidistant from $\overrightarrow{AC}$ and $\overrightarrow{AR}$. (Hint: draw a picture.)