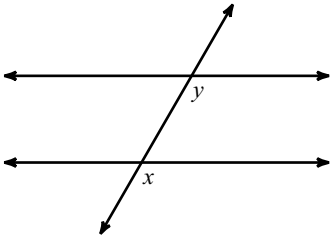
Geometry A FALL 2017 Name_____

Final Exam REVIEW A

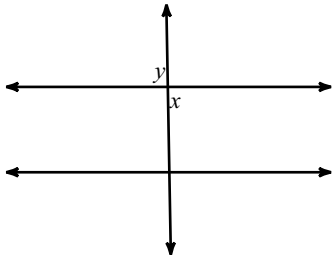
December _____

Identify each pair of angles as corresponding, alternate interior, alternate exterior, consecutive interior, or vertical.

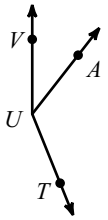
1)



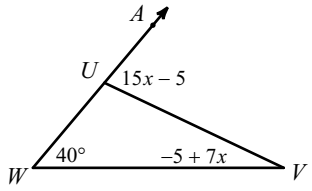
2)



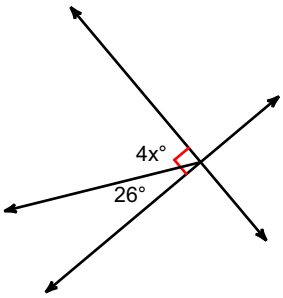
3) $m\angle VUA = 38°$, $m\angle VUT = 14x + 4$, and $m\angle AUT = 10x + 10$. Find x.



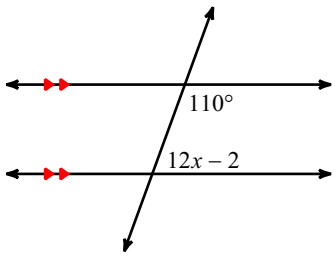
4)



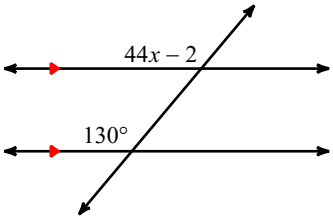
5)



6)

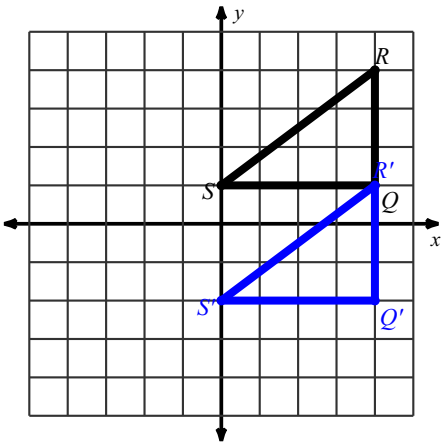


7)

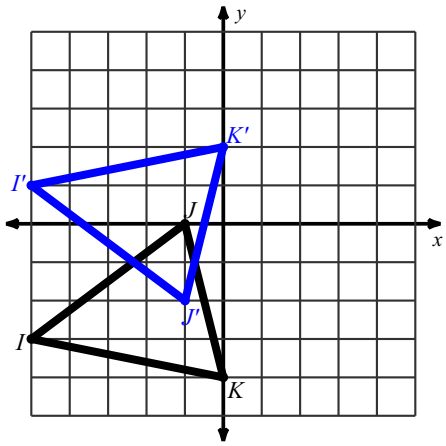


Write a rule to describe each transformation.

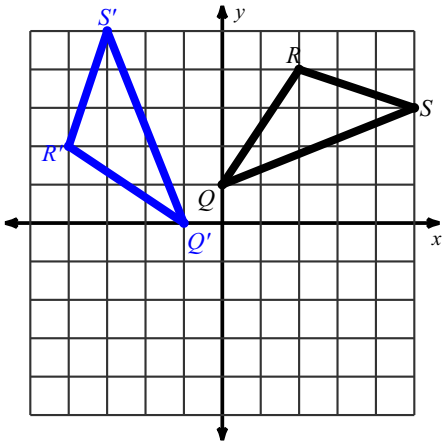
8)



9)

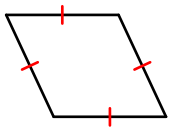


10)

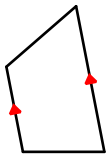


State all possible names for each figure.

11)

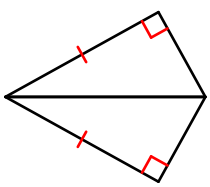


12)

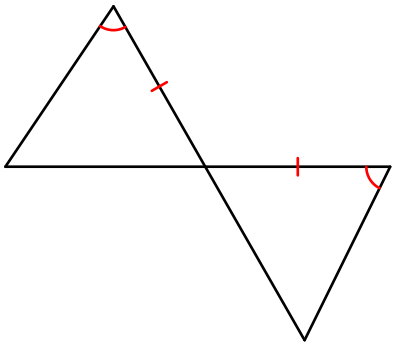


State if the two triangles are congruent. If they are, state how you know.

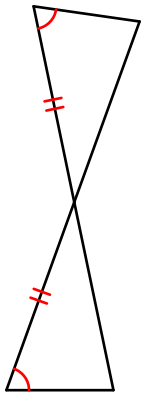
13)



14)

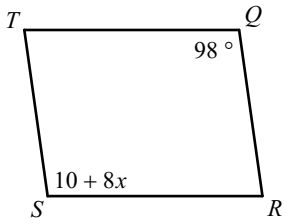


15)

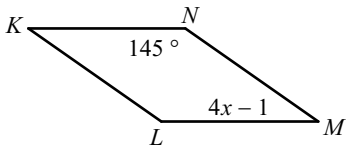


Solve for *x*. Each figure is a parallelogram.

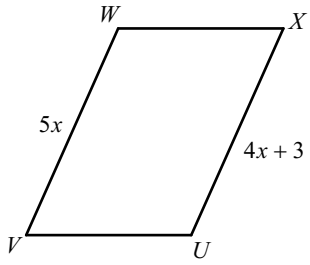
16)



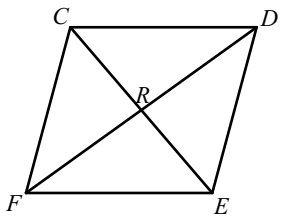
17)



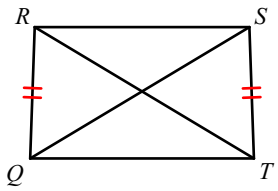
18)



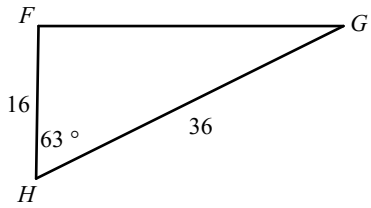
19) $RF = 23$
$DF = 4x + 14$

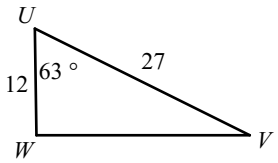


20) $QS = 17$
$RT = 7x + 3$

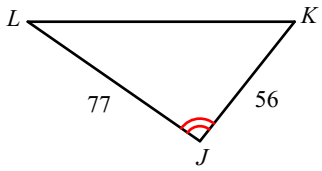


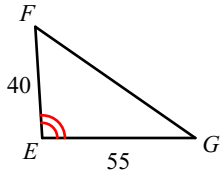
21) $\triangle HGF \sim \triangle UVW$



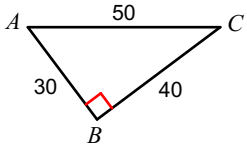


22) $\triangle JKL \sim \triangle EFG$

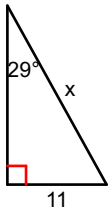




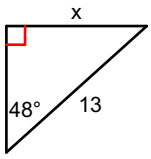
23) $\sin A$



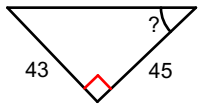
24)



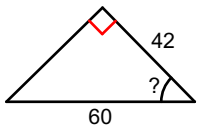
25)



26)

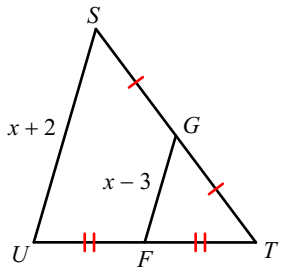


27)

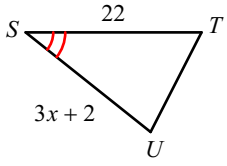


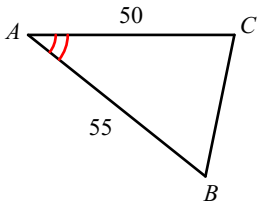
Solve for *x*.

28)

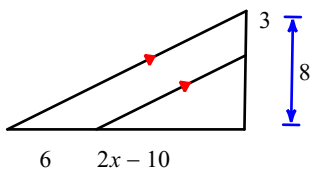


29) $\triangle ABC \sim \triangle STU$



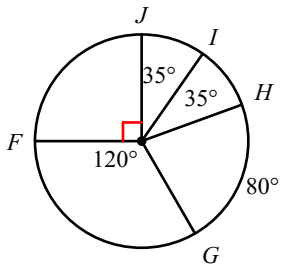


30)

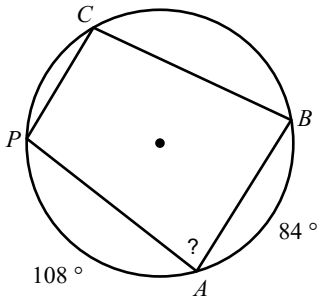


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

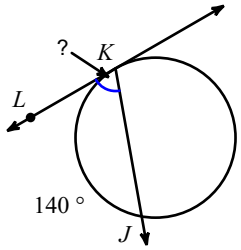
31) $m\overset{\frown}{JG}$



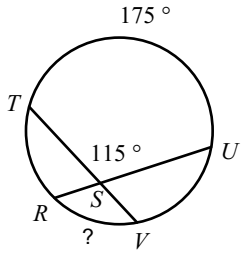
32)



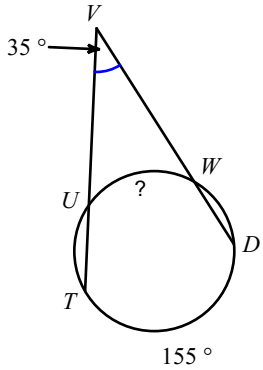
33)



34)

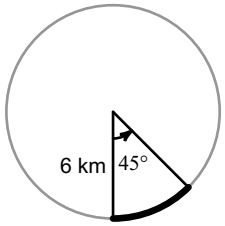


35)



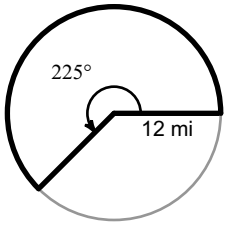
Find the length of the arc.

36)



Find the area of the sector.

37)



38) area = 49π m²
circumference =_____

39) circumference = 20π m

40) area = 49π yd²
diameter = _____

Answers to Final Exam REVIEW A

1) corresponding
2) vertical
3) 11
4) 5
5) 16
6) 6
7) 3
8) translation: $(x, y) \rightarrow (x, y - 3)$
9) reflection across $y = -1$
10) rotation 90° counterclockwise about the origin
11) quadrilateral, parallelogram, rhombus
12) quadrilateral, trapezoid
13) HL
14) ASA
15) ASA
16) 11
17) 9
18) 3
19) 8
20) 2
21) similar; SAS similarity
22) similar; SAS similarity
23) $\frac{4}{5}$
24) 22.7
25) 9.7
26) 44°
27) 46°
28) 8
29) 6
30) 10
31) 150°
32) 84°
33) 70°
34) 55°
35) 85°
36) $\frac{3\pi}{2}$ km
37) 90π mi²
38) 14π m
39) 10 m
40) 14 yd