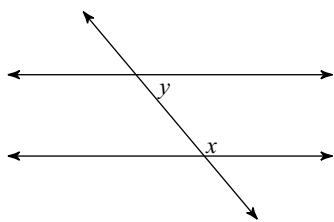


## FINAL EXAM REVIEW (DAY 2)

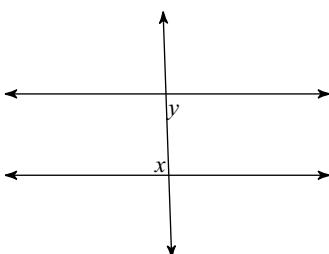
December \_\_\_\_\_

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

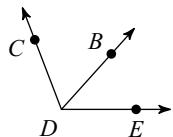
1)



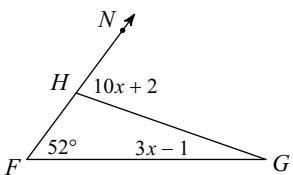
2)



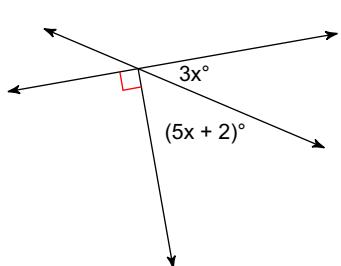
- 3) Find  $x$  if  $m\angle CDE = 111^\circ$ ,  
 $m\angle BDE = 9x - 6$ ,  
and  $m\angle CDB = 10x + 3$ .



4)

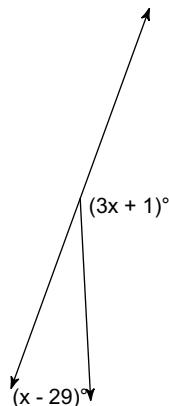


5)

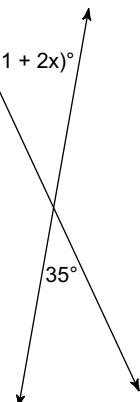


**Find the value of x.**

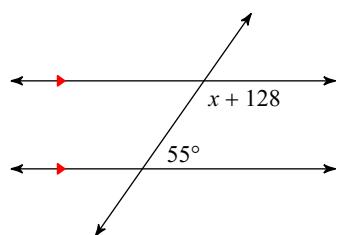
6)



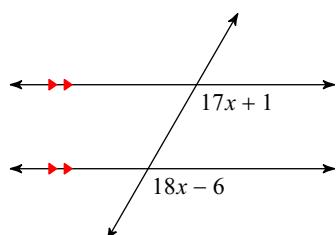
7)



8)

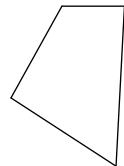


9)

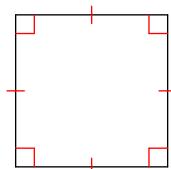


**State all possible names for each figure.**

10)

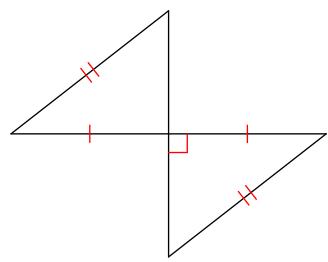


11)

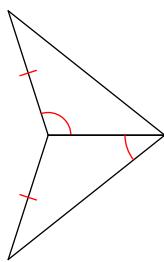


**State if the two triangles are congruent. If they are, state how you know.**

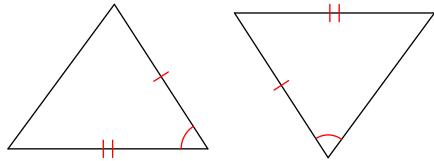
12)



13)

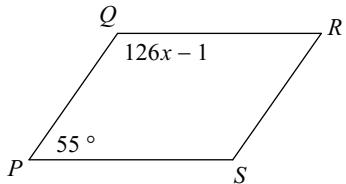


14)

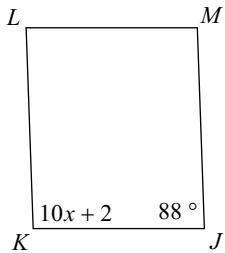


Solve for  $x$ . Each figure is a parallelogram.

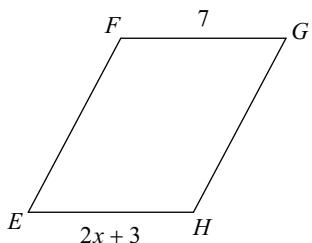
15)



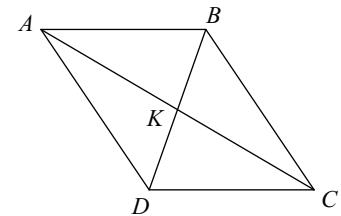
16)



17)

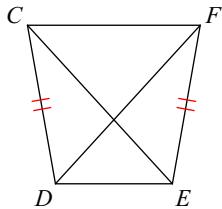
18)  $BD = 22$ 

$$KD = 5 + x$$



$$19) EC = 23$$

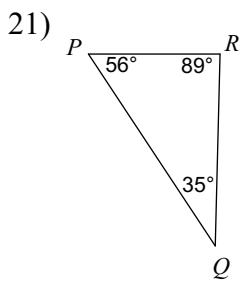
$$FD = 14x - 5$$



Two sides of a triangle have the following measures. Find the range of possible measures for the third side.

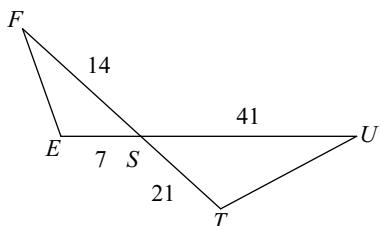
$$20) 10, 8$$

**Order the sides of each triangle from shortest to longest.**

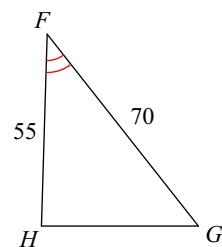
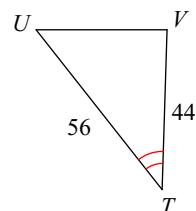


**Determine whether the triangles are similar. If so, by what similarity postulate?**

22)  $\triangle STU \sim \triangle SEF$

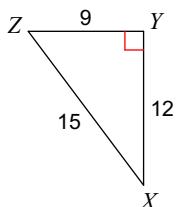


23)  $\triangle FGH \sim \triangle TUV$

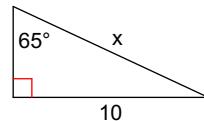


**For #24: Find the trig ratio. For #25-#28, solve for the missing side or missing angle.**

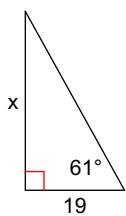
24)  $\cos Z$



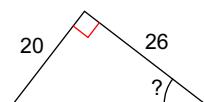
25)



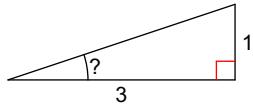
26)



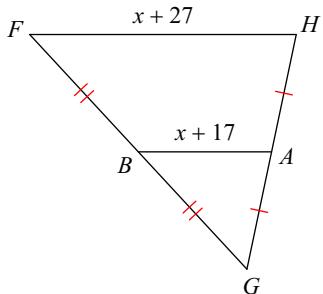
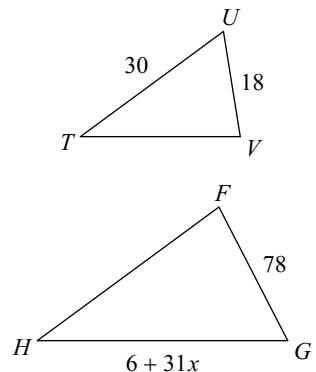
27)



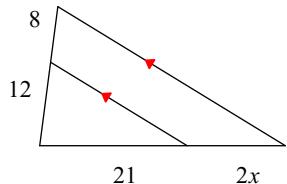
28)

**Solve for  $x$ .**

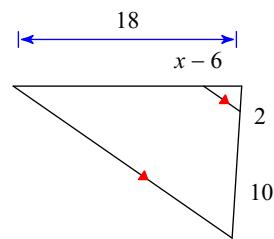
29)

30)  $\triangle HGF \sim \triangle TUV$ 

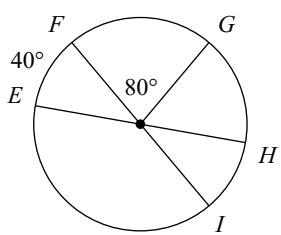
31)



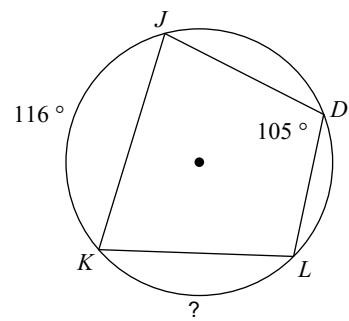
32)



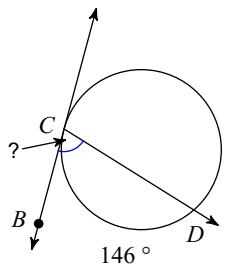
**Find the measure of the arc or angle indicated. Assume that lines which appear to be diameters are actual diameters.**

33)  $m\widehat{IE}$ 

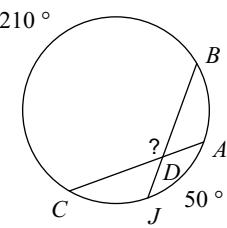
34)



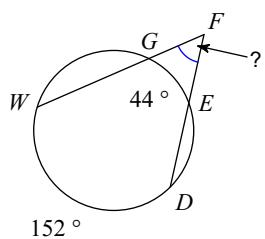
35)



36)

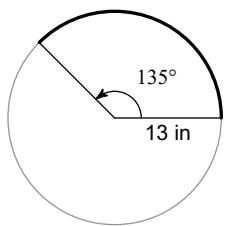


37)

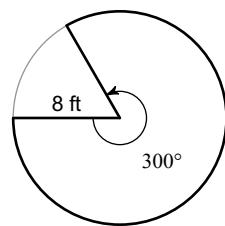


**For #38, find the arc length. For #39, find the area of the shaded region.**

38)



39)



**Find the circumference.**

40)  $\text{area} = 81\pi \text{ yd}^2$

**Find the radius.**

41)  $\text{circumference} = 6\pi \text{ yd}$

**Find the diameter.**

42)  $\text{area} = 49\pi \text{ mi}^2$

## Answers to FINAL EXAM REVIEW (DAY 2)

- |  |   |                   |                 |
|--|---|-------------------|-----------------|
| 1) consecutive interior                                      | 2) alternate interior                                   | 3) 6              | 4) 7            |
| 5) 11  | 6) 52   | 7) 17             | 8) -3           |
| 9) 7   | 10) quadrilateral                                       |                   |                 |
| 11) quadrilateral, parallelogram, rhombus, rectangle, square |   |                   |                 |
| 12) HL   | 13) Not congruent                                       | 14) Not congruent | 15) 1           |
| 16) 9  | 17) $\frac{2}{RP}$ , $\overline{RQ}$ , $\overline{QP}$  | 18) 6             | 19) 2           |
| 20) $2 < x < 18$   | 21) $\overline{RP}$ , $\overline{RQ}$ , $\overline{QP}$ | 22) not similar   |                 |
| 23) similar; SAS similarity                                  | 24) $\frac{3}{5}$                                       | 25) 11.0          |                 |
| 26) 34.3   | 27) $38^\circ$  | 28) $18^\circ$    | 29) -7          |
| 30) 4  | 31) 7   | 32) 9             | 33) $140^\circ$ |
| 34) $94^\circ$   | 35) $73^\circ$  | 36) $130^\circ$   | 37) $54^\circ$  |
| 38) $\frac{39\pi}{4}$ in                                     | 39) $\frac{160\pi}{3}$ ft <sup>2</sup>                  | 40) $18\pi$ yd    | 41) 3 yd        |
| 42) 14 mi  |   |                   |                 |