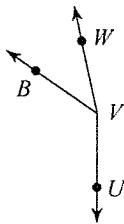
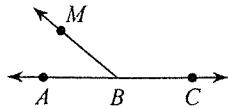


Line/Angle Addition Practice and Transformation Review

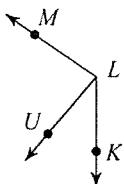
- 1) Find x if $m\angle UVB = 125^\circ$,
 $m\angle BVW = 22x - 1$, and $m\angle UVW = 84x$.



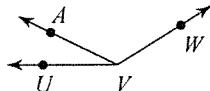
- 2) $m\angle MBC = 140^\circ$, $m\angle ABC = 23x - 5$,
and $m\angle ABM = 3x + 15$. Find x .



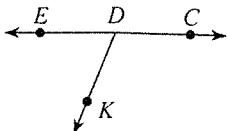
- 3) $m\angle ULM = 93 + x$, $m\angle KLU = 48 + x$,
and $m\angle KLM = 125^\circ$. Find x .



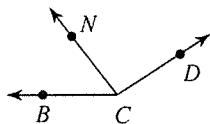
- 4) $m\angle UVA = 3x + 8$, $m\angle AVW = 122^\circ$,
and $m\angle UVW = 24x + 4$. Find x .



- 5) Find $m\angle KDE$ if $m\angle KDE = 9x + 5$,
 $m\angle CDE = 178^\circ$, and $m\angle CDK = 14x + 12$.



- 6) $m\angle BCN = 9x - 2$, $m\angle BCD = 147^\circ$,
and $m\angle NCD = 16x - 1$. Find $m\angle NCD$.



Solve for x .

7)
$$x + 18 + 2x + 23 = 11$$

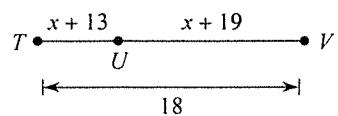
8)
$$8 + (-10 + x) + (-14 + 2x) = 0$$

9)
$$x + 9 + 8 + x + 11 = 0$$

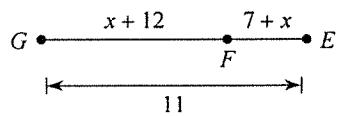
10)
$$x + 12 + x + 11 + 15 = 0$$

Find the length indicated.

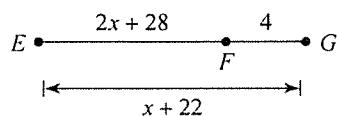
11) Find TU



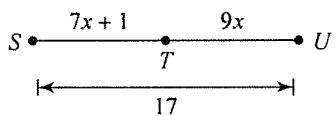
12) Find FE



13) Find EF

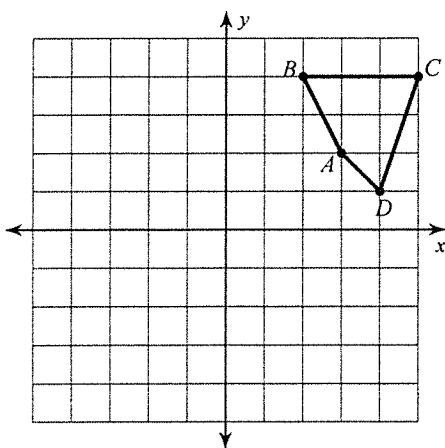


14) Find TU

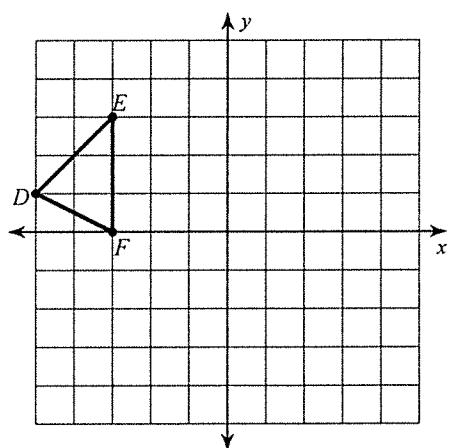


Graph the image of the figure using the transformation given.

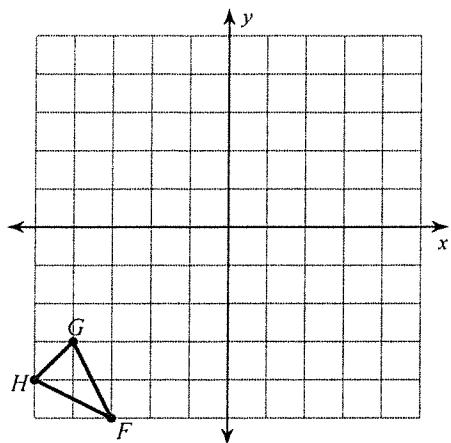
15) reflection across the x-axis



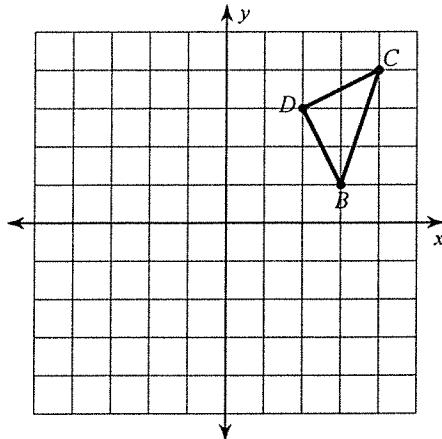
16) translation: $(x, y) \rightarrow (x + 8, y + 1)$



17) translation: $(x, y) \rightarrow (x + 6, y + 6)$

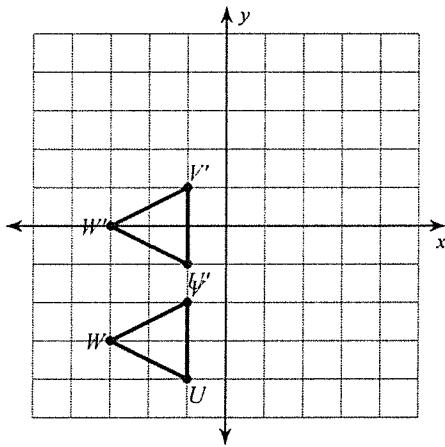


18) reflection across the y-axis

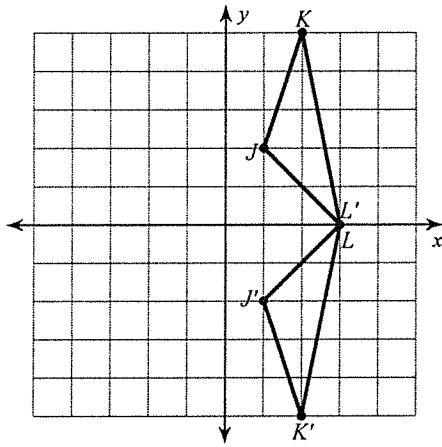


Write a rule to describe each transformation.

19)

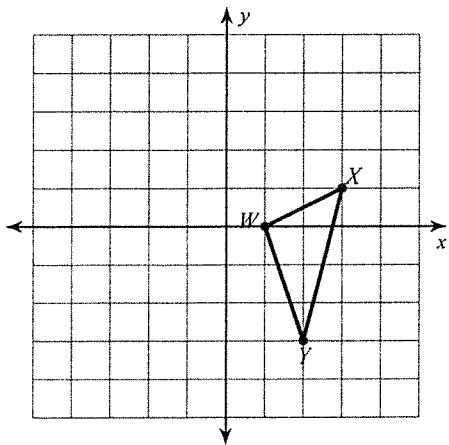


20)



Graph the image of the figure using the transformation given.

21) rotation 180° about the origin



Kart Racing - Logic Grid

Use the clues to solve this problem and to discover the finishing positions of each pilot.

1. The pilot who finished in first is older than Sam.
2. Ronald is 13 years old.
3. Sam finished in second place.
4. Alan is one year younger than the pilot who finished in third.

	Ages				Positions			
	13 years	14 years	15 years	16 years	First	Second	Third	Fourth
Names	Alan	Fred	Sam	Ronald				
Positions	First							
		Second						
			Third					
				Fourth				

Names	Ages	Positions
Alan		
Fred		
Sam		
Ronald		

play more logic grid puzzles on brainzilla.com/logic-grid-puzzles