

## Distance, Midpoint, Angles, Triangles, and Transformations

Period \_\_\_\_

**Find the distance between each pair of points.**

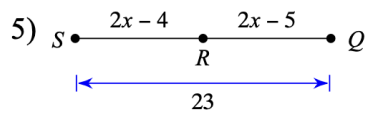
1)  $(4, -7), (-1, 5)$

2)  $(-7, -3), (-6, 3)$

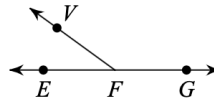
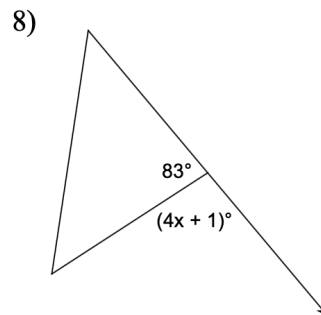
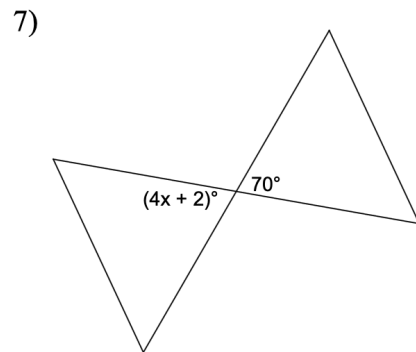
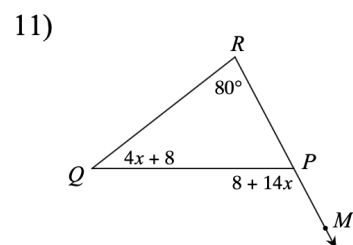
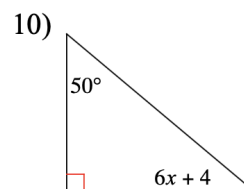
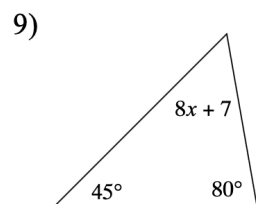
**Find the midpoint of the line segment with the given endpoints.**

3)  $(7, -9), (-9, -5)$

4)  $(4, 7), (8, -3)$

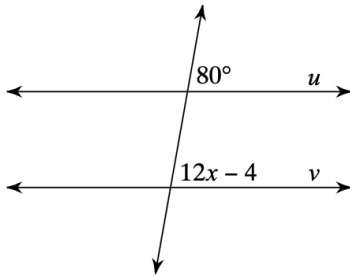
**Solve for  $x$  using the segment or angle addition postulate.**

6) Find  $m\angle EFV$  if  $m\angle VFG = 144^\circ$  and  $m\angle EFG = 180^\circ$ .

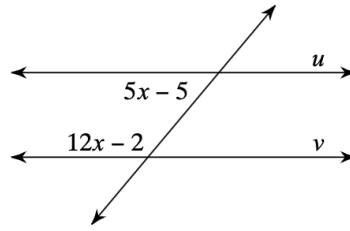
**Find the value of  $x$ .****Solve for  $x$ .**

Find the value of  $x$  that makes lines  $u$  and  $v$  parallel.

16)

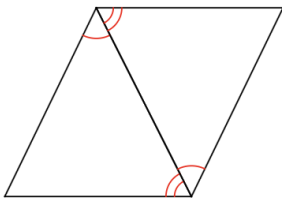


17)

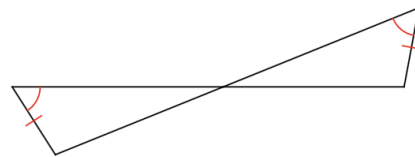


Determine if the two triangles are congruent. If they are, state how you know and mark any missing corresponding congruent parts.

18)

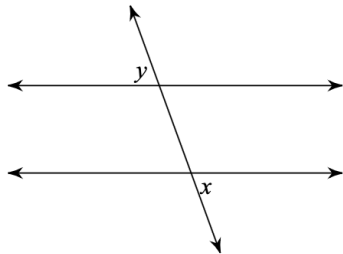


19)



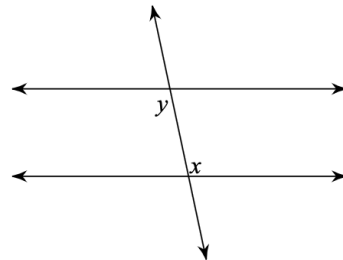
Identify each pair of angles as corresponding, alternate interior, alternate exterior, or consecutive interior.

12)



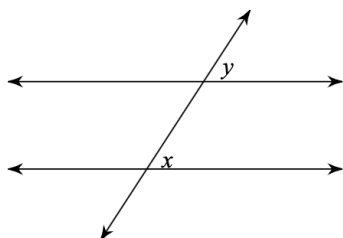
- A) alternate interior
- B) consecutive interior
- C) corresponding
- D) alternate exterior

13)



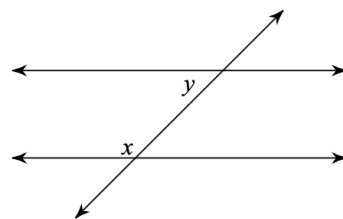
- A) consecutive interior
- B) corresponding
- C) alternate interior
- D) alternate exterior

14)



- A) alternate exterior
- B) consecutive interior
- C) corresponding
- D) alternate interior

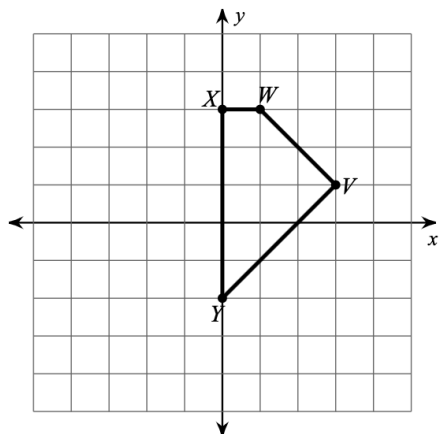
15)



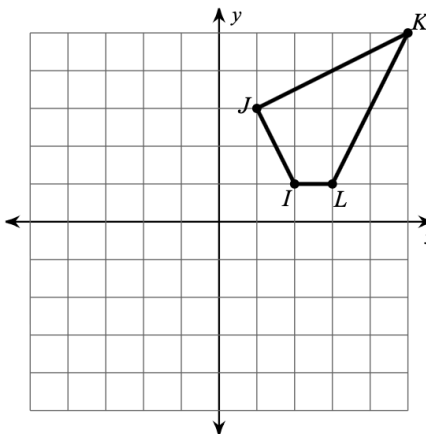
- A) consecutive interior
- B) alternate interior
- C) corresponding
- D) alternate exterior

**Graph the image of the figure using the transformation given.**

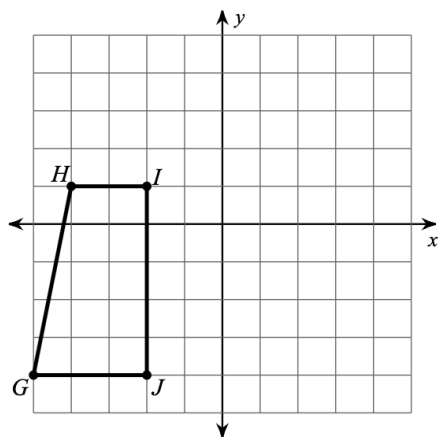
20) translation:  $(x, y) \rightarrow (x - 5, y - 1)$



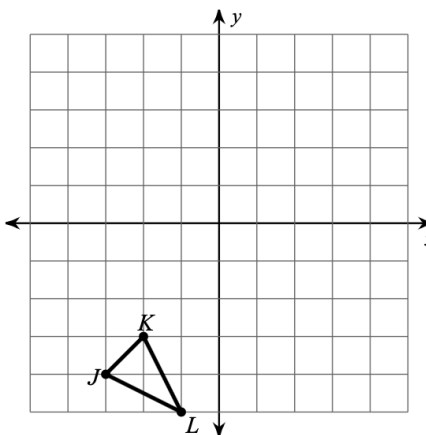
21) rotation  $90^\circ$  counterclockwise about the origin



22) reflection across the y-axis



23) reflection across  $x = -1$



**Complete the two-way frequency table.**

24)

	Dandelion	Clif Bar	Slurpee	Total
Goat	16	6		73
Sheep		4		
Total	33			99

**Determine the number or probability. Include the fraction and percent when necessary.**

a) What percent of animals prefer slurpees? \_\_\_\_\_ = \_\_\_\_\_ %

b) Of the animals who prefer slurpees, what percent are sheep? \_\_\_\_\_ = \_\_\_\_\_ %

c) How many sheep prefer Clif Bars? \_\_\_\_\_