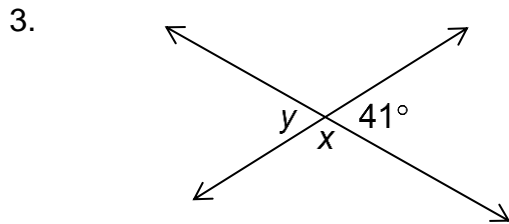


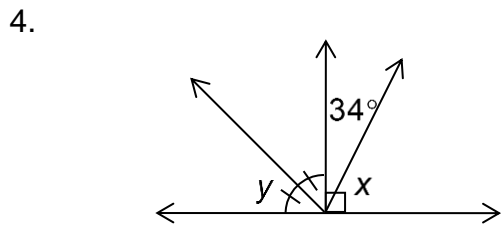
Assignment: T1-14 Angle Relationships

1. a) $m\angle 1 = 39^\circ$, what is the measure of the complement?
 b) $m\angle 1 = 87^\circ$, what is the measure of the complement?
2. a) $m\angle 1 = 83^\circ$, what is the measure of the supplement?
 b) $m\angle 1 = 144^\circ$, what is the measure of the supplement?

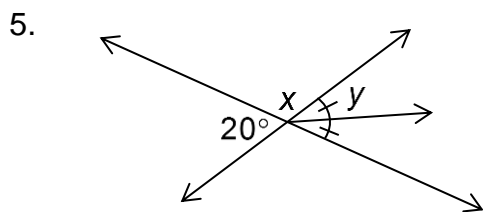
Find the value of each variable. State the relationship used.



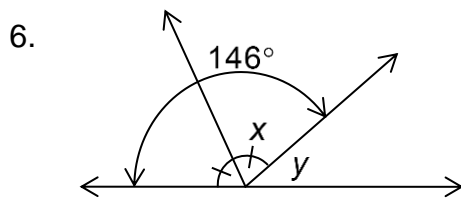
$x =$
 relationship used:
 $y =$
 relationship used:



$x =$
 relationship used:
 $y =$
 relationship used:

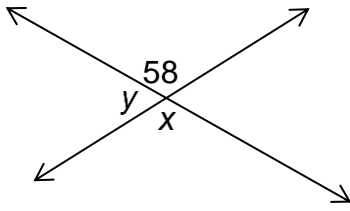


$x =$
 relationship used:
 $y =$
 relationships used (there are 2):



$x =$
 relationship used:
 $y =$
 relationship used:

7.



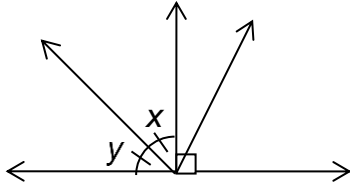
$x =$

relationship used:

$y =$

relationship used:

8.



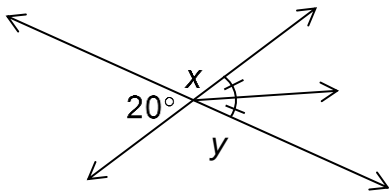
$x =$

relationship used:

$y =$

relationship used:

9.



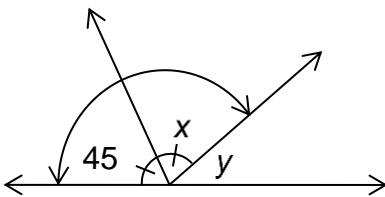
$x =$

relationship used:

$y =$

relationships used (there are 2):

10.



$x =$

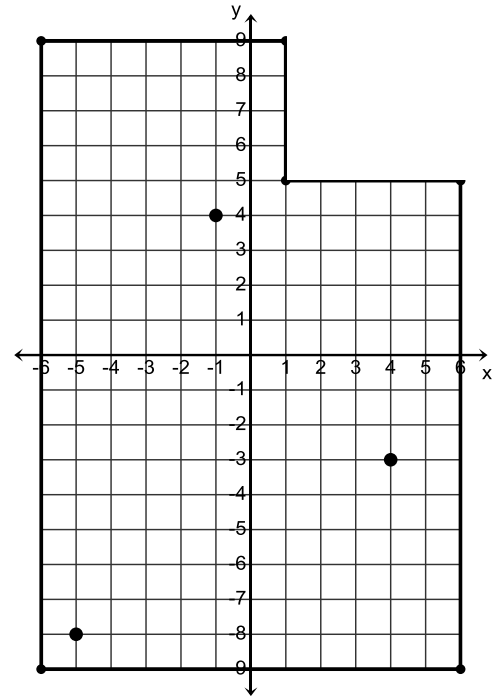
relationship used:

$y =$

relationship used:

Use the map of Utah to answer the questions below.

Lone Peak is represented by the point $(-1, 4)$. Label that point P. St. George is represented by the point $(-5, -8)$. Label that point S. Moab is represented by the point $(4, -3)$. Label that point B.



7. What is the distance, on the map, from Lone Peak to St. George?

8. What is the distance, on the map, from St. George to Moab?

9. You will be driving from Lone Peak to St. George and you know that you will have to stop to fill up your car about half-way. Find the midpoint, and label it M.

10. Find the actual distance from Lone Peak to St. George if $MP = 4x + 35$ and $MS = 6x - 15$.

11. Name 2 collinear points on the map.

12. Name 3 coplanar points on the map.

13. What is the name of the angle that is created between Lone Peak, St. George, and Moab? What type of angle is formed?

14. What is the name of the angle that is created between Lone Peak, M, and St. George? What type of angle is formed?

15. What is the name of the angle that is created between Moab, M, and St. George? What type of angle is formed?