



Vertically Opposite Angles

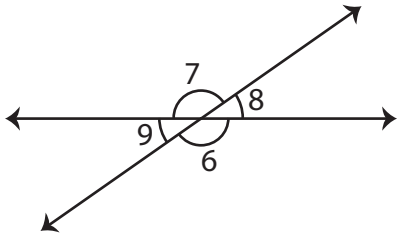
Name _____

Score _____

PA:22

Find the unknown angle.

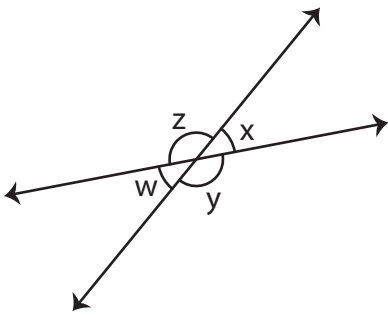
1)



$m\angle 6 = 145^\circ$; $m\angle 8 =$

$m\angle 9 =$; $m\angle 7 =$

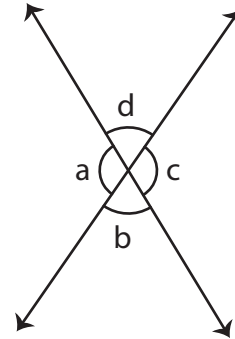
3)



$m\angle x = 40^\circ$; $m\angle y =$

$m\angle z =$; $m\angle w =$

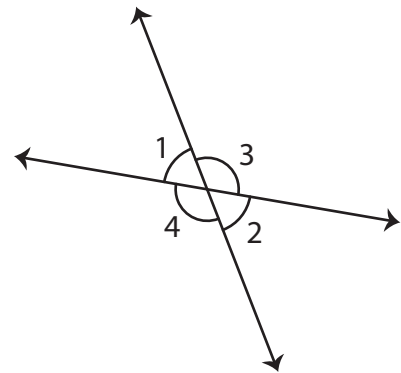
2)



$m\angle a = 114^\circ$; $m\angle b =$

$m\angle c =$; $m\angle d =$

4)

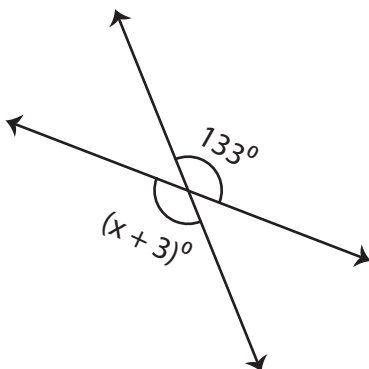


$m\angle 2 = 59^\circ$; $m\angle 4 =$

$m\angle 1 =$; $m\angle 3 =$

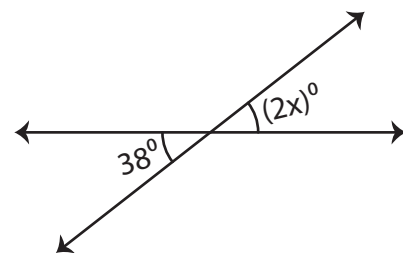
Find the value of x.

1)



$x =$

2)



$x =$



Vertically Opposite Angles

Name _____

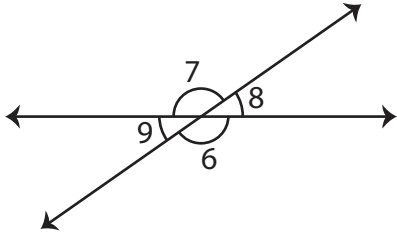
Score _____

Answer key

PA:22

Find the unknown angle.

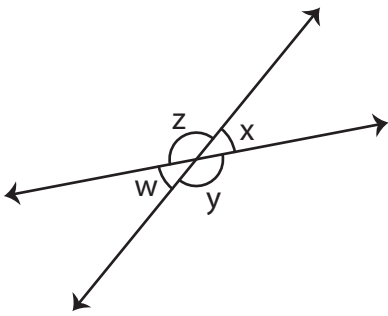
1)



$$m\angle 6 = 145^\circ ; m\angle 8 = \boxed{35^\circ}$$

$$m\angle 9 = \boxed{35^\circ} ; m\angle 7 = \boxed{145^\circ}$$

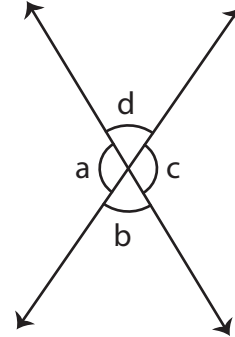
3)



$$m\angle x = 40^\circ ; m\angle y = \boxed{140^\circ}$$

$$m\angle z = \boxed{140^\circ} ; m\angle w = \boxed{40^\circ}$$

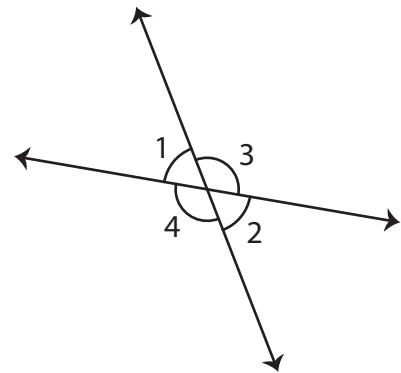
2)



$$m\angle a = 114^\circ ; m\angle b = \boxed{66^\circ}$$

$$m\angle c = \boxed{114^\circ} ; m\angle d = \boxed{66^\circ}$$

4)

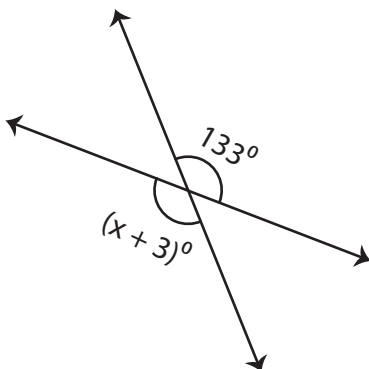


$$m\angle 2 = 59^\circ ; m\angle 4 = \boxed{121^\circ}$$

$$m\angle 1 = \boxed{59^\circ} ; m\angle 3 = \boxed{121^\circ}$$

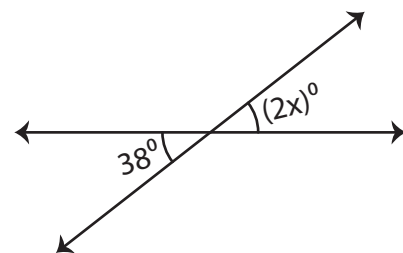
Find the value of x.

1)



$$x = \boxed{130}$$

2)



$$x = \boxed{19}$$