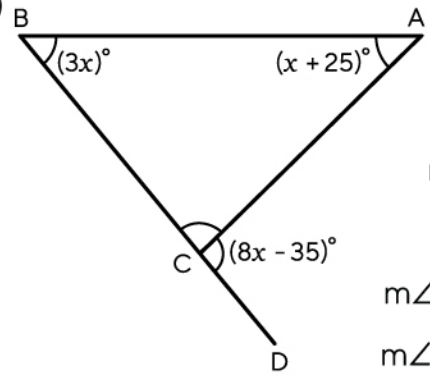
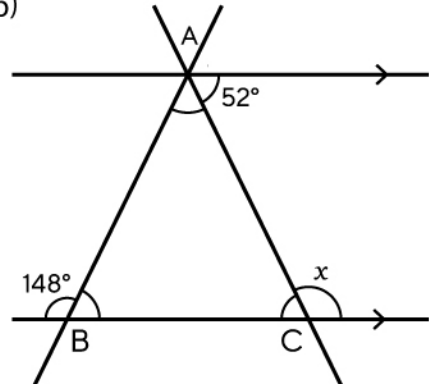


Angle Relationships in Parallel Lines and Triangles

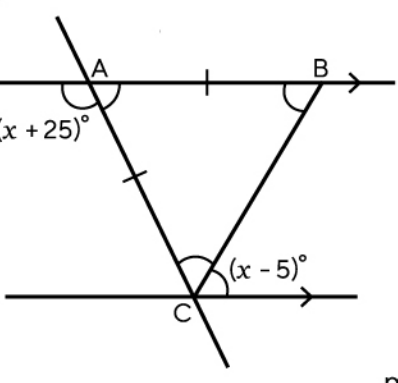
Use angle relationships in the triangles to solve for the variables, Then find the angles.

a) 

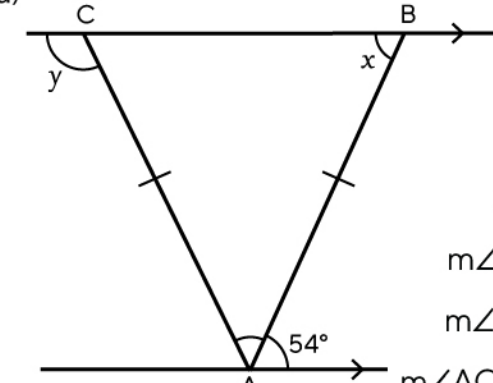
 $x =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle ACB =$ _____
 $m\angle ACD =$ _____

b) 

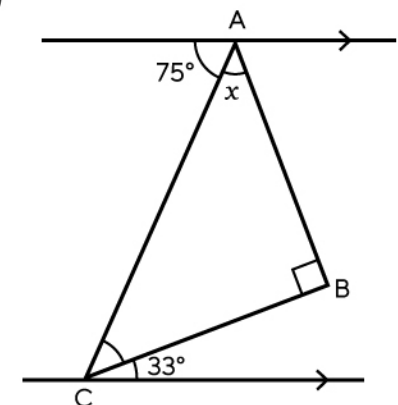
 $x =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle C =$ _____

c) 

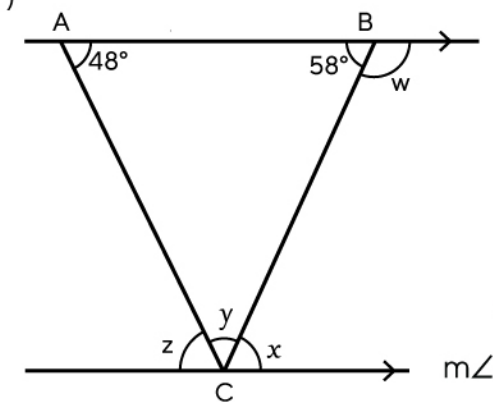
 $x =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle ACB =$ _____

d) 

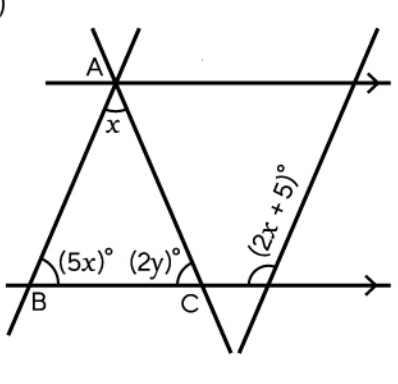
 $x =$ _____
 $y =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle ACB =$ _____

e) 

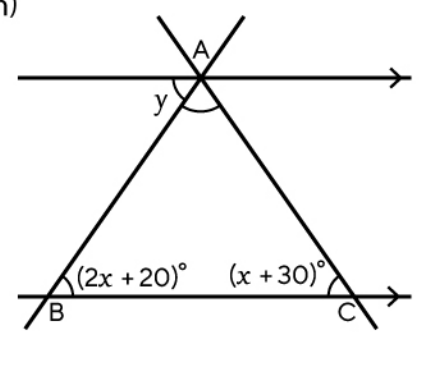
 $x =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle C =$ _____

f) 

 $x =$ _____
 $y =$ _____
 $z =$ _____
 $w =$ _____
 $m\angle C =$ _____

g) 

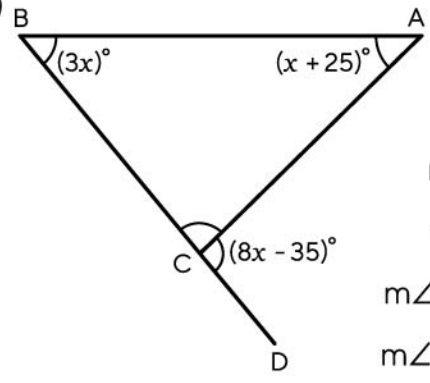
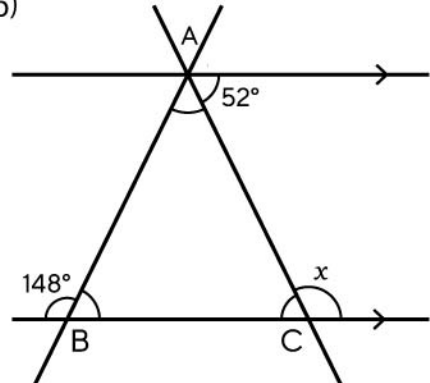
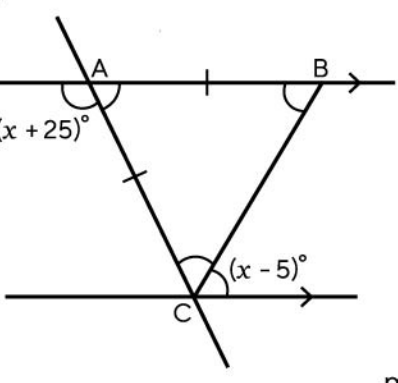
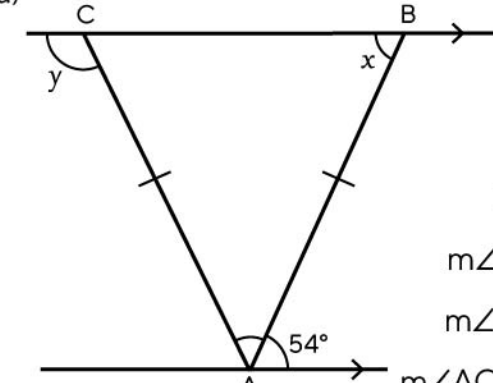
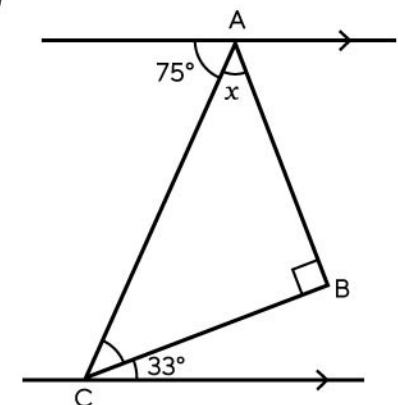
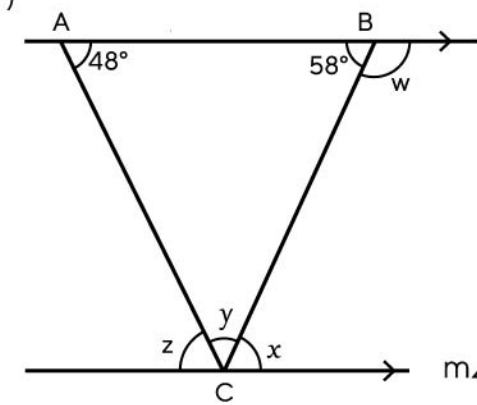
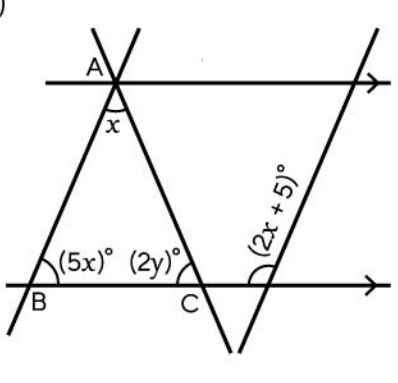
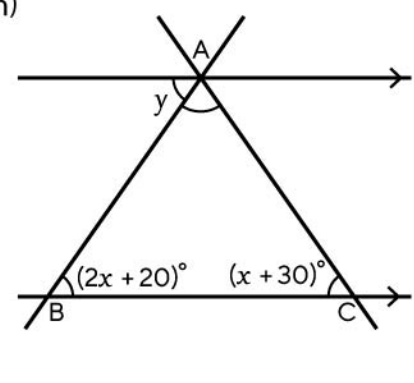
 $x =$ _____
 $y =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle C =$ _____

h) 

 $x =$ _____
 $y =$ _____
 $m\angle A =$ _____
 $m\angle B =$ _____
 $m\angle C =$ _____

Angle Relationships in Parallel Lines and Triangles

Answers

<p>a)</p>  <p> $x = \underline{15^\circ}$ $m\angle A = \underline{40^\circ}$ $m\angle B = \underline{45^\circ}$ $m\angle ACB = \underline{95^\circ}$ $m\angle ACD = \underline{85^\circ}$ </p>	<p>b)</p>  <p> $x = \underline{128^\circ}$ $m\angle A = \underline{96^\circ}$ $m\angle B = \underline{32^\circ}$ $m\angle C = \underline{52^\circ}$ </p>
<p>c)</p>  <p> $x = \underline{35^\circ}$ $m\angle A = \underline{120^\circ}$ $m\angle B = \underline{30^\circ}$ $m\angle ACB = \underline{30^\circ}$ </p>	<p>d)</p>  <p> $x = \underline{54^\circ}$ $y = \underline{126^\circ}$ $m\angle A = \underline{72^\circ}$ $m\angle B = \underline{54^\circ}$ $m\angle ACB = \underline{54^\circ}$ </p>
<p>e)</p>  <p> $x = \underline{48^\circ}$ $m\angle A = \underline{48^\circ}$ $m\angle B = \underline{90^\circ}$ $m\angle C = \underline{42^\circ}$ </p>	<p>f)</p>  <p> $x = \underline{58^\circ}$ $y = \underline{74^\circ}$ $z = \underline{48^\circ}$ $w = \underline{122^\circ}$ $m\angle C = \underline{74^\circ}$ </p>
<p>g)</p>  <p> $x = \underline{25^\circ}$ $y = \underline{15^\circ}$ $m\angle A = \underline{25^\circ}$ $m\angle B = \underline{125^\circ}$ $m\angle C = \underline{30^\circ}$ </p>	<p>h)</p>  <p> $x = \underline{10^\circ}$ $y = \underline{40^\circ}$ $m\angle A = \underline{100^\circ}$ $m\angle B = \underline{40^\circ}$ $m\angle C = \underline{40^\circ}$ </p>