

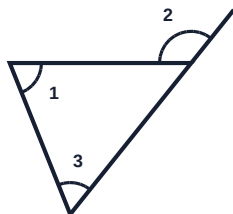
Math Sheet

Name _____ Score _____ / 8 Teacher _____ Date _____

Triangle exterior angle theorem

Use the exterior angle and the two remote interior angles to solve for x . Diagrams are not to scale.

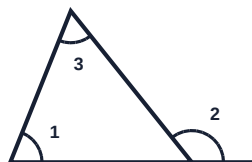
1.



Angle 1: x°
Angle 2: 161°
Angle 3: 89°

$x =$ _____

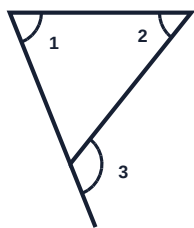
2.



Angle 1: 112°
Angle 2: x°
Angle 3: 63°

$x =$ _____

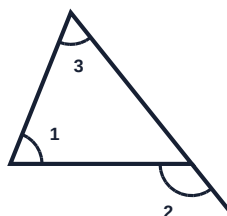
3.



Angle 1: 74°
Angle 2: 21°
Angle 3: x°

$x =$ _____

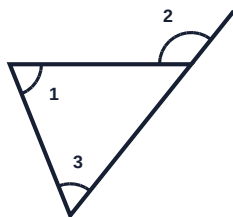
4.



Angle 1: x°
Angle 2: 148°
Angle 3: 52°

$x =$ _____

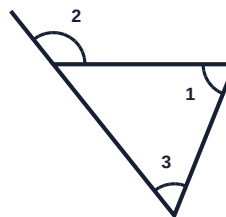
5.



Angle 1: 109°
Angle 2: x°
Angle 3: 50°

$x =$ _____

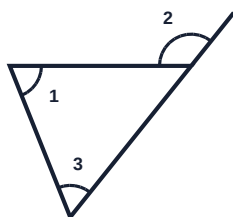
6.



Angle 1: 65°
Angle 2: x°
Angle 3: 27°

$x =$ _____

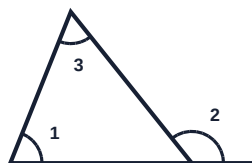
7.



Angle 1: 32°
Angle 2: 140°
Angle 3: x°

$x =$ _____

8.



Angle 1: 49°
Angle 2: 155°
Angle 3: x°

$x =$ _____

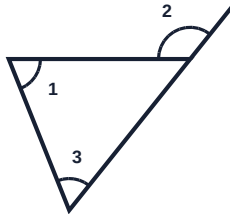
Math Sheet

Name _____ Score _____ / 8 Teacher _____ Date _____

Triangle exterior angle theorem - Answer key

Use the exterior angle and the two remote interior angles to solve for x . Diagrams are not to scale.

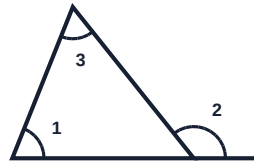
1.



Angle 1: x°
Angle 2: 161°
Angle 3: 89°

$x = 72$

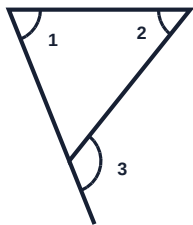
2.



Angle 1: 112°
Angle 2: x°
Angle 3: 63°

$x = 175$

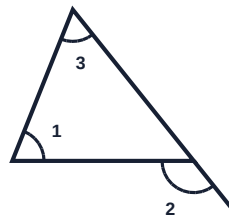
3.



Angle 1: 74°
Angle 2: 21°
Angle 3: x°

$x = 95$

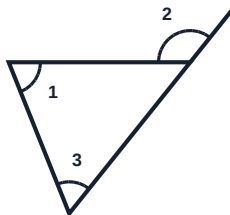
4.



Angle 1: x°
Angle 2: 148°
Angle 3: 52°

$x = 96$

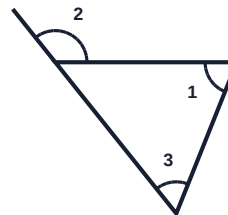
5.



Angle 1: 109°
Angle 2: x°
Angle 3: 50°

$x = 159$

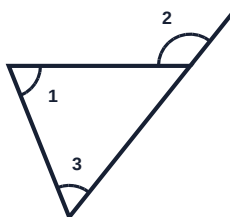
6.



Angle 1: 65°
Angle 2: x°
Angle 3: 27°

$x = 92$

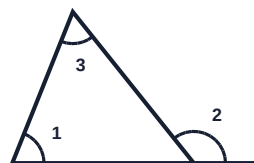
7.



Angle 1: 32°
Angle 2: 140°
Angle 3: x°

$x = 108$

8.



Angle 1: 49°
Angle 2: 155°
Angle 3: x°

$x = 106$