

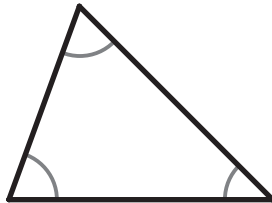
## Classifying Triangles (by Angles)

G-TRI 1

**Instructions:** For each triangle, mark the box that matches its type when classifying by angles.

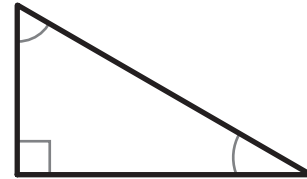
1

- Acute  
 Right  
 Obtuse



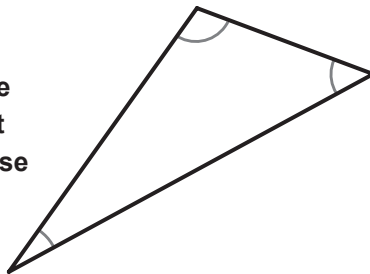
2

- Acute  
 Right  
 Obtuse



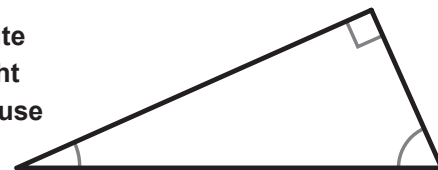
3

- Acute  
 Right  
 Obtuse



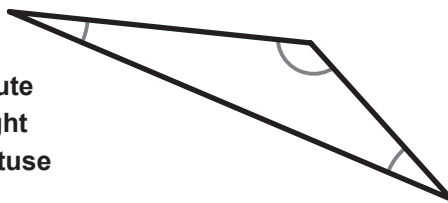
4

- Acute  
 Right  
 Obtuse



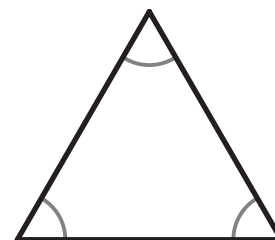
5

- Acute  
 Right  
 Obtuse



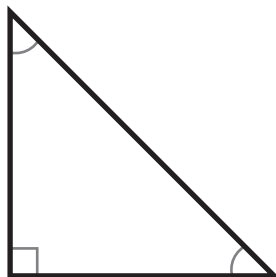
6

- Acute  
 Right  
 Obtuse



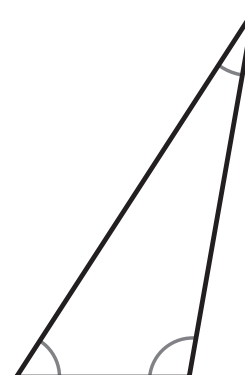
7

- Acute  
 Right  
 Obtuse



8

- Acute  
 Right  
 Obtuse



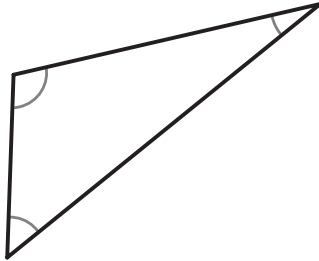
## Classifying Triangles (by Sides)

G-TRI 2

**Instructions:** For each triangle, mark the box that matches its type when classifying by sides. The marks on the sides of the triangles show when two sides are "congruent" or the same length.

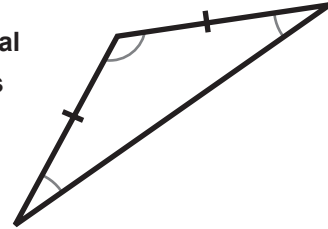
1

- Equilateral  
 Isosceles  
 Scalene



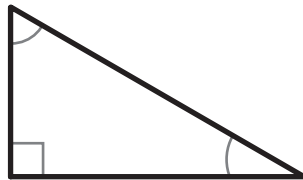
2

- Equilateral  
 Isosceles  
 Scalene



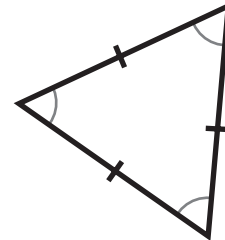
3

- Equilateral  
 Isosceles  
 Scalene



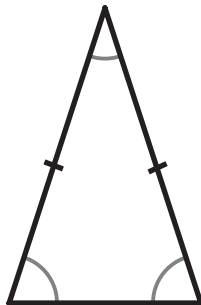
4

- Equilateral  
 Isosceles  
 Scalene



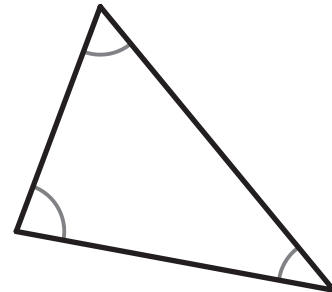
5

- Equilateral  
 Isosceles  
 Scalene



6

- Equilateral  
 Isosceles  
 Scalene



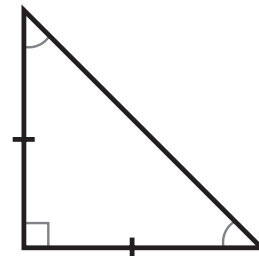
7

- Equilateral  
 Isosceles  
 Scalene



8

- Equilateral  
 Isosceles  
 Scalene

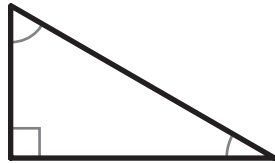


## Classifying Triangles (by both Angle and Sides)

G-TRI 3

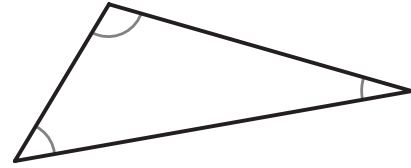
**Instructions:** For each triangle, mark the box from each category that matches its type. The marks on the sides of the triangles show when two sides are "congruent" or the same length.

1



- |   |   |
|---|---|
| <input type="checkbox"/> Acute            | <input type="checkbox"/> Equilateral        |
| <input checked="" type="checkbox"/> Right | <input type="checkbox"/> Isosceles          |
| <input type="checkbox"/> Obtuse           | <input checked="" type="checkbox"/> Scalene |

2



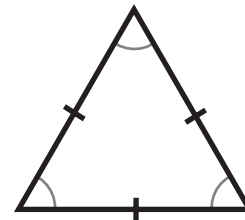
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

3



- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

4



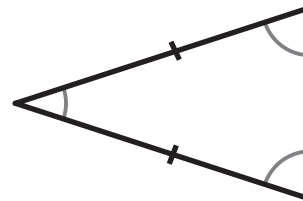
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

5



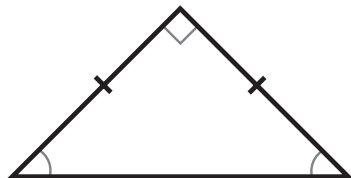
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

6



- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

7



- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

8



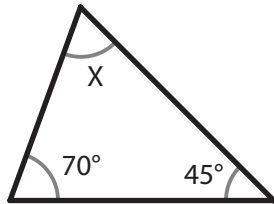
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

## Finding an Unknown Angle

G-TRI 4

**Instructions:** For each triangle, find the unknown angle (X). Remember that for each triangle, the three interior angles must add up to 180 degrees.

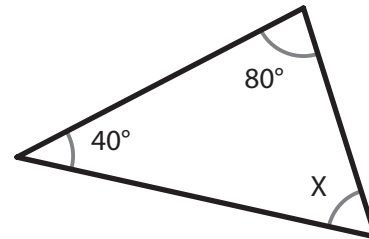
1



$$m\angle X = \underline{65^\circ}$$

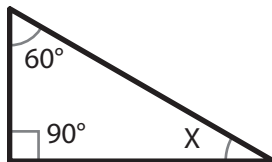
$$\begin{array}{r} 70 \\ + 45 \\ \hline 115 \end{array} \quad \begin{array}{r} 180 \\ - 115 \\ \hline 65 \end{array}$$

2



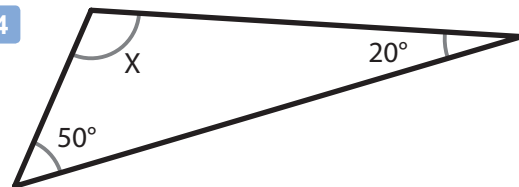
$$m\angle X = \underline{\hspace{2cm}}$$

3



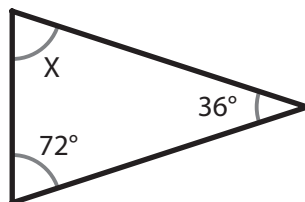
$$m\angle X = \underline{\hspace{2cm}}$$

4



$$m\angle X = \underline{\hspace{2cm}}$$

5



$$m\angle X = \underline{\hspace{2cm}}$$

6



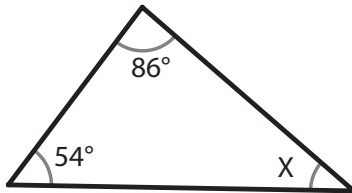
$$m\angle X = \underline{\hspace{2cm}}$$

## Finding an Unknown Angle - Set 2

G-TRI 5

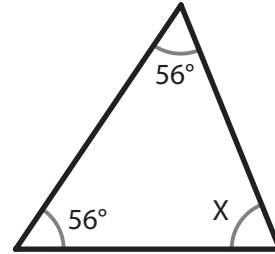
**Instructions:** For each triangle, find the unknown angle (X). Remember that for each triangle, the three interior angles must add up to 180 degrees.

1



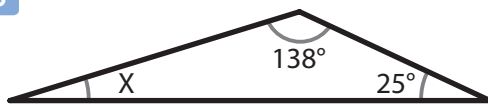
$m\angle X = \underline{\hspace{2cm}}$

2



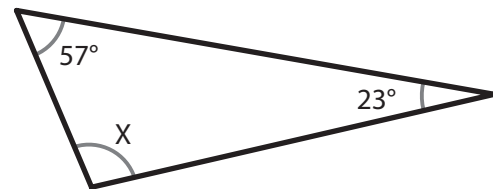
$m\angle X = \underline{\hspace{2cm}}$

3



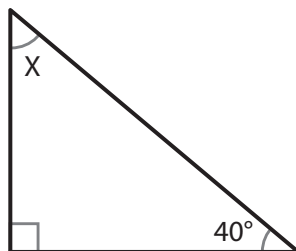
$m\angle X = \underline{\hspace{2cm}}$

4



$m\angle X = \underline{\hspace{2cm}}$

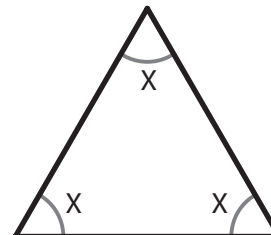
5



$m\angle X = \underline{\hspace{2cm}}$

6

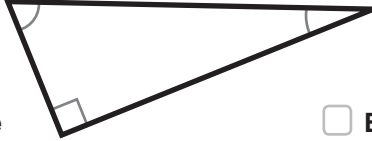
An equilateral triangle always has three equal angles. What is their measure?



$m\angle X = \underline{\hspace{2cm}}$

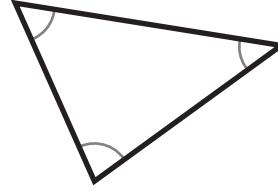
## Triangles

**1** Classify this triangle. Check any that apply.



- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

**2** Classify this triangle. Check any that apply.



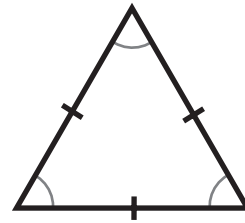
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

**3** Classify this triangle. Check any that apply.  
(the marked sides are the same length)



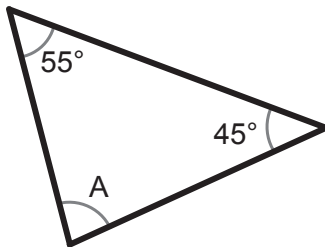
- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

**4** Classify this triangle. Check any that apply.  
(the marked sides are the same length)



- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <input type="checkbox"/> Acute  | <input type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right  | <input type="checkbox"/> Isosceles   |
| <input type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene     |

**5** Find the unknown angle.



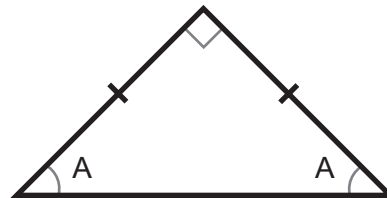
**6** Find the unknown angle.



**7** Find the unknown angle.



**8** Find the unknown angle.



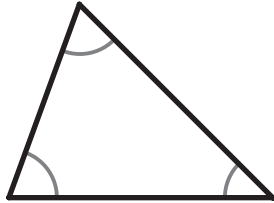
## Classifying Triangles (by Angles)

G-TRI 1

**Instructions:** For each triangle, mark the box that matches its type when classifying by angles.

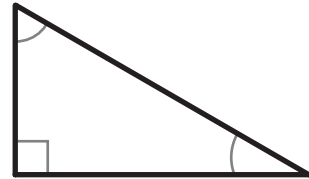
1

- Acute  
 Right  
 Obtuse



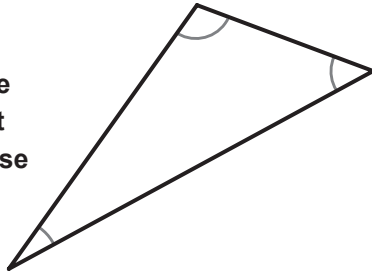
2

- Acute  
 Right  
 Obtuse



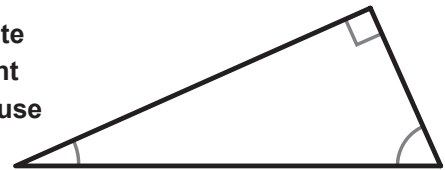
3

- Acute  
 Right  
 Obtuse



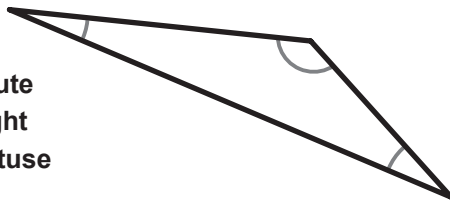
4

- Acute  
 Right  
 Obtuse



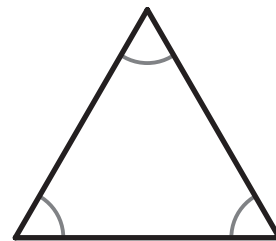
5

- Acute  
 Right  
 Obtuse



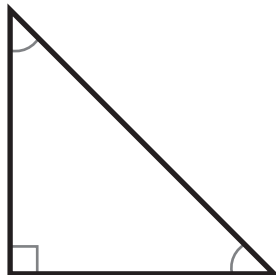
6

- Acute  
 Right  
 Obtuse



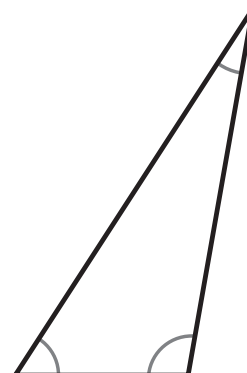
7

- Acute  
 Right  
 Obtuse



8

- Acute  
 Right  
 Obtuse



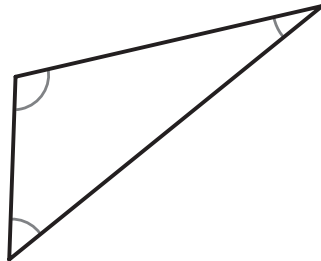
## Classifying Triangles (by Sides)

G-TRI 2

**Instructions:** For each triangle, mark the box that matches its type when classifying by sides. The marks on the sides of the triangles show when two sides are "congruent" or the same length.

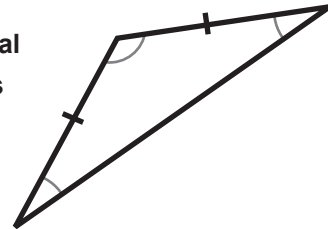
1

- Equilateral  
 Isosceles  
 Scalene



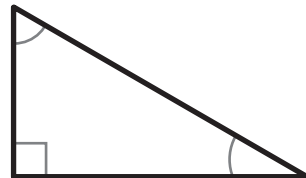
2

- Equilateral  
 Isosceles  
 Scalene



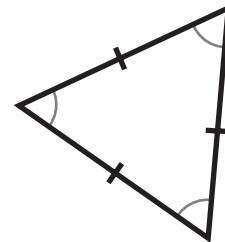
3

- Equilateral  
 Isosceles  
 Scalene



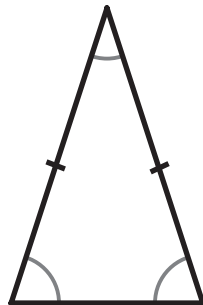
4

- Equilateral  
 Isosceles  
 Scalene



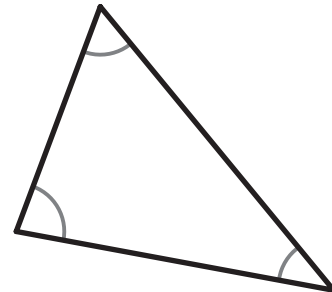
5

- Equilateral  
 Isosceles  
 Scalene



6

- Equilateral  
 Isosceles  
 Scalene



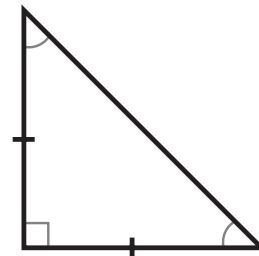
7

- Equilateral  
 Isosceles  
 Scalene



8

- Equilateral  
 Isosceles  
 Scalene



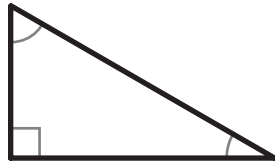


## Classifying Triangles (by both Angle and Sides)

G-TRI 3

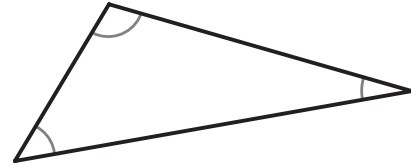
**Instructions:** For each triangle, mark the box from each category that matches its type. The marks on the sides of the triangles show when two sides are "congruent" or the same length.

1



- |   |   |
|---|---|
| <input type="checkbox"/> Acute            | <input type="checkbox"/> Equilateral        |
| <input checked="" type="checkbox"/> Right | <input type="checkbox"/> Isosceles          |
| <input type="checkbox"/> Obtuse           | <input checked="" type="checkbox"/> Scalene |

2



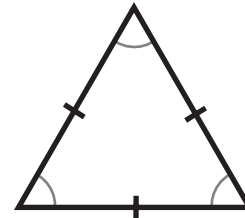
- |  |   |
|--|---|
| <input type="checkbox"/> Acute             | <input type="checkbox"/> Equilateral        |
| <input type="checkbox"/> Right             | <input type="checkbox"/> Isosceles          |
| <input checked="" type="checkbox"/> Obtuse | <input checked="" type="checkbox"/> Scalene |

3



- |  |   |
|--|---|
| <input type="checkbox"/> Acute             | <input type="checkbox"/> Equilateral          |
| <input type="checkbox"/> Right             | <input checked="" type="checkbox"/> Isosceles |
| <input checked="" type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene              |

4



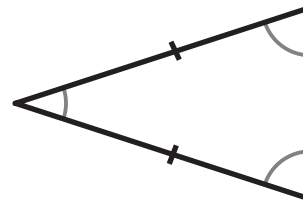
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Acute | <input checked="" type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right            | <input type="checkbox"/> Isosceles              |
| <input type="checkbox"/> Obtuse           | <input type="checkbox"/> Scalene                |

5



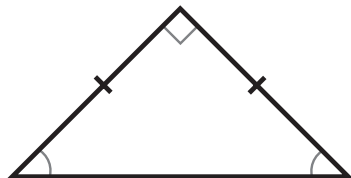
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Acute | <input type="checkbox"/> Equilateral        |
| <input type="checkbox"/> Right            | <input type="checkbox"/> Isosceles          |
| <input type="checkbox"/> Obtuse           | <input checked="" type="checkbox"/> Scalene |

6



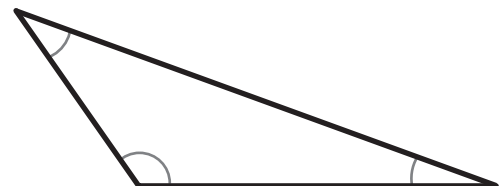
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Acute | <input type="checkbox"/> Equilateral          |
| <input type="checkbox"/> Right            | <input checked="" type="checkbox"/> Isosceles |
| <input type="checkbox"/> Obtuse           | <input type="checkbox"/> Scalene              |

7



- |   |   |
|---|---|
| <input type="checkbox"/> Acute            | <input type="checkbox"/> Equilateral          |
| <input checked="" type="checkbox"/> Right | <input checked="" type="checkbox"/> Isosceles |
| <input type="checkbox"/> Obtuse           | <input type="checkbox"/> Scalene              |

8



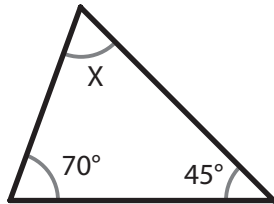
- |  |   |
|--|---|
| <input type="checkbox"/> Acute             | <input type="checkbox"/> Equilateral        |
| <input type="checkbox"/> Right             | <input type="checkbox"/> Isosceles          |
| <input checked="" type="checkbox"/> Obtuse | <input checked="" type="checkbox"/> Scalene |

## Finding an Unknown Angle

G-TRI 4

**Instructions:** For each triangle, find the unknown angle (X). Remember that for each triangle, the three interior angles must add up to 180 degrees.

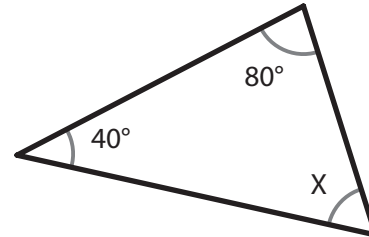
1



$$m\angle X = \underline{65^\circ}$$

$$\begin{array}{r} 70 \\ + 45 \\ \hline 115 \end{array} \quad \begin{array}{r} 180 \\ - 115 \\ \hline 65 \end{array}$$

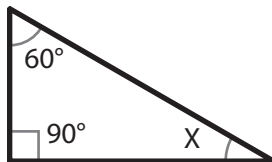
2



$$m\angle X = \underline{60^\circ}$$

$$\begin{array}{r} 80 \\ + 40 \\ \hline 120 \end{array} \quad \begin{array}{r} 180 \\ - 120 \\ \hline 60 \end{array}$$

3



$$m\angle X = \underline{30^\circ}$$

$$\begin{array}{r} 90 \\ + 60 \\ \hline 150 \end{array} \quad \begin{array}{r} 180 \\ - 150 \\ \hline 30 \end{array}$$

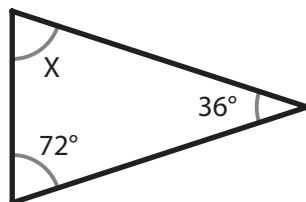
4



$$m\angle X = \underline{110^\circ}$$

$$\begin{array}{r} 50 \\ + 20 \\ \hline 70 \end{array} \quad \begin{array}{r} 180 \\ - 70 \\ \hline 110 \end{array}$$

5



$$m\angle X = \underline{72^\circ}$$

$$\begin{array}{r} 72 \\ + 36 \\ \hline 108 \end{array} \quad \begin{array}{r} 180 \\ - 108 \\ \hline 72 \end{array}$$

6



$$m\angle X = \underline{90^\circ}$$

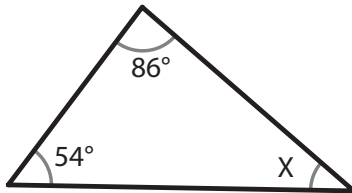
$$\begin{array}{r} 75 \\ + 15 \\ \hline 90 \end{array} \quad \begin{array}{r} 180 \\ - 90 \\ \hline 90 \end{array}$$

## Finding an Unknown Angle - Set 2

G-TRI 5

**Instructions:** For each triangle, find the unknown angle (X). Remember that for each triangle, the three interior angles must add up to 180 degrees.

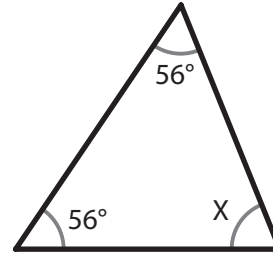
1



$$m\angle X = \underline{40^\circ}$$

$$\begin{array}{r} 1 \\ 86 \\ + 54 \\ \hline 140 \end{array} \quad \begin{array}{r} 180 \\ - 140 \\ \hline 40 \end{array}$$

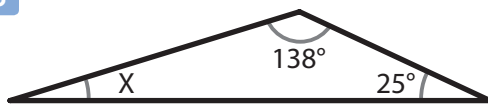
2



$$m\angle X = \underline{68^\circ}$$

$$\begin{array}{r} 1 \\ 56 \\ + 56 \\ \hline 112 \end{array} \quad \begin{array}{r} 7 \\ 180 \\ - 112 \\ \hline 68 \end{array}$$

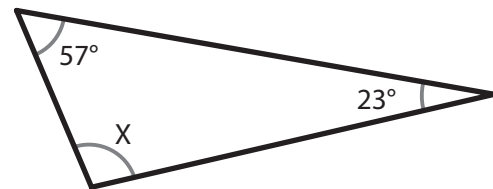
3



$$m\angle X = \underline{17^\circ}$$

$$\begin{array}{r} 1 \\ 138 \\ + 25 \\ \hline 163 \end{array} \quad \begin{array}{r} 7 \\ 180 \\ - 163 \\ \hline 17 \end{array}$$

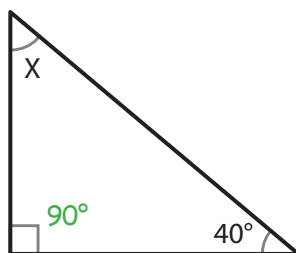
4



$$m\angle X = \underline{100^\circ}$$

$$\begin{array}{r} 1 \\ 57 \\ + 23 \\ \hline 80 \end{array} \quad \begin{array}{r} 180 \\ - 80 \\ \hline 100 \end{array}$$

5

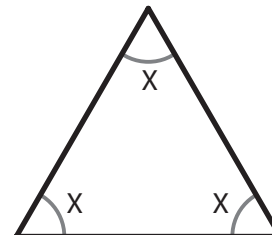


$$m\angle X = \underline{50^\circ}$$

$$\begin{array}{r} 90 \\ + 40 \\ \hline 130 \end{array} \quad \begin{array}{r} 180 \\ - 130 \\ \hline 50 \end{array}$$

6

An equilateral triangle always has three equal angles. What is their measure?



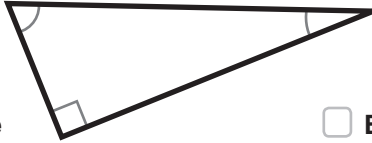
$$m\angle X = \underline{60^\circ}$$

To get the answer, divide the total (180°) by 3

$$\begin{array}{r} 60^\circ \\ 3 \overline{)180} \\ - 18 \\ \hline 00 \end{array}$$

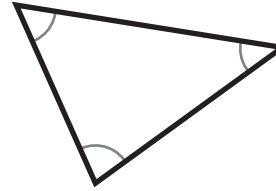
## Triangles

**1** Classify this triangle. Check any that apply.



- |   |   |
|---|---|
| <input type="checkbox"/> Acute            | <input type="checkbox"/> Equilateral        |
| <input checked="" type="checkbox"/> Right | <input type="checkbox"/> Isosceles          |
| <input type="checkbox"/> Obtuse           | <input checked="" type="checkbox"/> Scalene |

**2** Classify this triangle. Check any that apply.



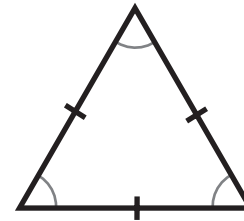
- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Acute | <input type="checkbox"/> Equilateral        |
| <input type="checkbox"/> Right            | <input type="checkbox"/> Isosceles          |
| <input type="checkbox"/> Obtuse           | <input checked="" type="checkbox"/> Scalene |

**3** Classify this triangle. Check any that apply. (the marked sides are the same length)



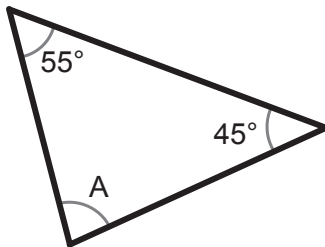
- |  |   |
|--|---|
| <input type="checkbox"/> Acute             | <input type="checkbox"/> Equilateral          |
| <input type="checkbox"/> Right             | <input checked="" type="checkbox"/> Isosceles |
| <input checked="" type="checkbox"/> Obtuse | <input type="checkbox"/> Scalene              |

**4** Classify this triangle. Check any that apply. (the marked sides are the same length)



- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Acute | <input checked="" type="checkbox"/> Equilateral |
| <input type="checkbox"/> Right            | <input type="checkbox"/> Isosceles              |
| <input type="checkbox"/> Obtuse           | <input type="checkbox"/> Scalene                |

**5** Find the unknown angle.



$$\begin{array}{r} 1 \\ 55 \\ + 45 \\ \hline 100 \\ 180 \\ - 100 \\ \hline 80 \end{array}$$

$m\angle A = 80^\circ$

**6** Find the unknown angle.



$$\begin{array}{r} 1 \\ 125 \\ + 35 \\ \hline 160 \\ 180 \\ - 160 \\ \hline 20 \end{array}$$

$m\angle A = 20^\circ$

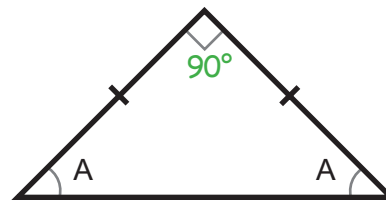
**7** Find the unknown angle.



$$\begin{array}{r} 90 \\ + 23 \\ \hline 113 \\ 180 \\ - 113 \\ \hline 67 \end{array}$$

$m\angle A = 67^\circ$

**8** Find the unknown angle.



$$\begin{array}{r} 180 \\ - 90 \\ \hline 90 \\ 90 \div 2 = 45 \end{array}$$

$m\angle A = 45^\circ$