Basic angle rules (with reasons)

Name:	Class:	Date:

Mark	/ 12	%

1) Find the value of *x*, **giving a reason for your answer**.   [1]

$x =$ ⬚ $^\circ$
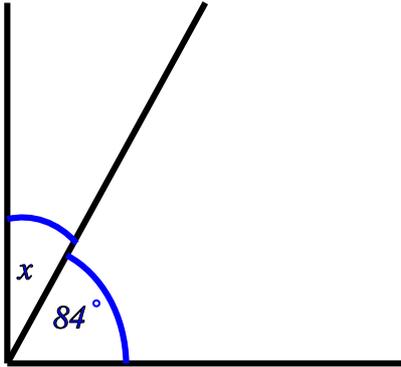
Reason:

2) Find the value of *x*, **giving a reason for your answer**.   [1]

$x =$ ⬚ $^\circ$
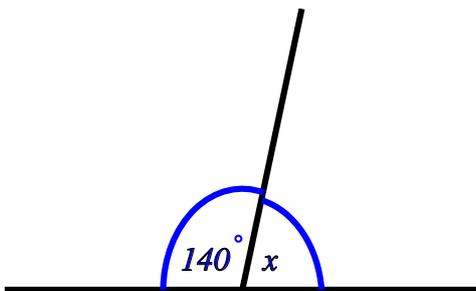
Reason:

3) Find the value of *x*, **giving a reason for your answer**.   [1]

111° 73°

x   120°

$x =$ ____ °
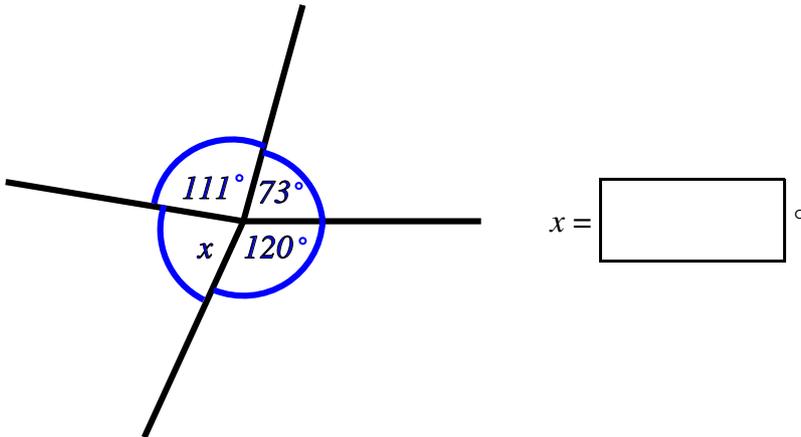
Reason:

4) Find the value of *x*, **giving a reason for your answer**.   [1]

114°   *x*

$x =$ ____ °
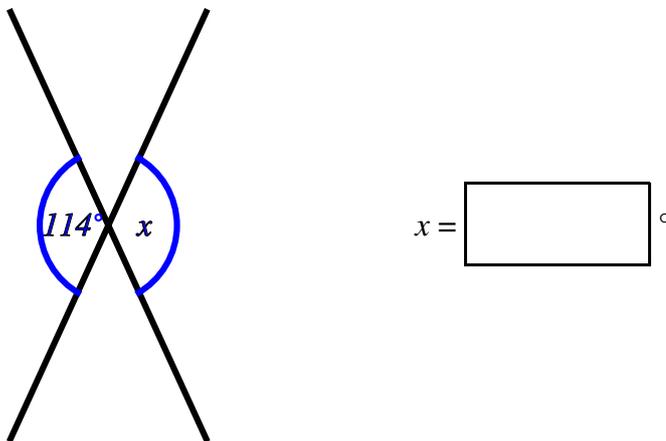
Reason:

5) Find the value of *a*, **giving a reason for your answer**.   [1]

$a = $ ◻ °
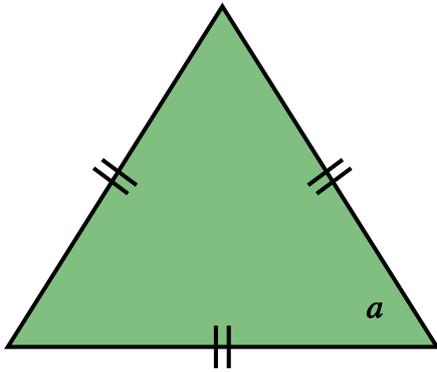
Reason:

6) Find the value of *x*, **giving a reason for your answer**.   [1]

$x = $ ◻ °
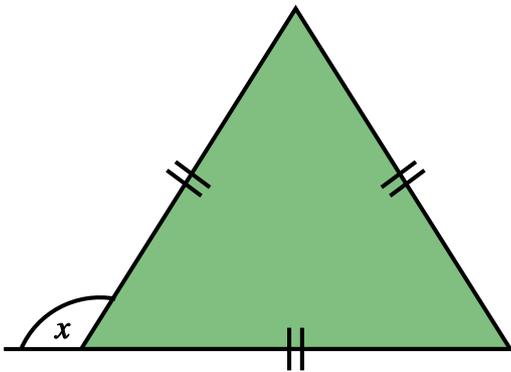
Reason:

7) Find the value of *x*, **giving a reason for your answer**.   [1]

$x = $ ⬚ °
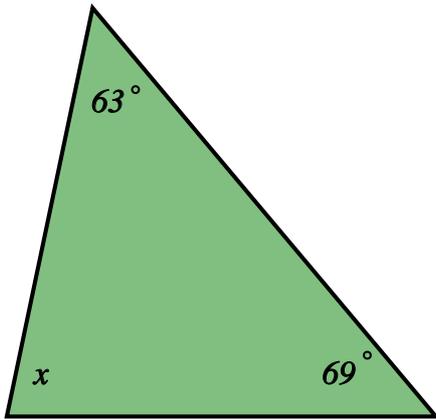
Reason:

8) Find the value of *x*, **giving a reason for your answer**.   [1]

$x = $ ⬚ °
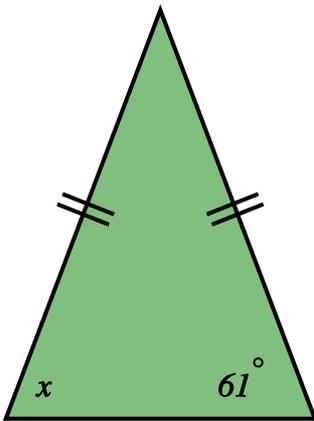
Reason:

9) Find the value of *x*, **giving a reason for your answer**.   [1]

38 °

x

$x =$ ⬚ °
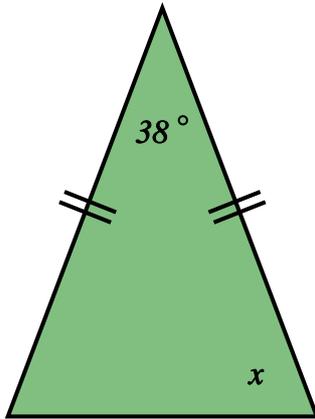
Reason:

10) Find the value of *x*, **giving a reason for your answer**.   [1]

x

71 °

$x =$ ⬚ °
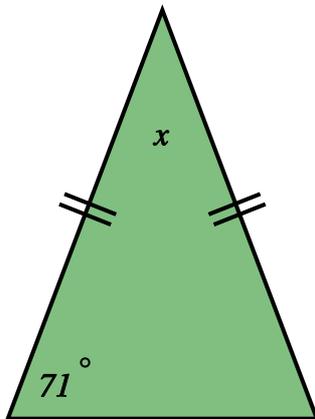
Reason:

11) Find the value of x, **giving a reason for your answer**. [1]

$x = $ [   ] °
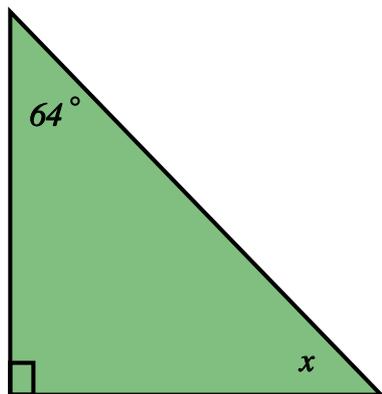
Reason:

12) Find the value of x, **giving a reason for your answer**. [1]

$x = $ [   ] °
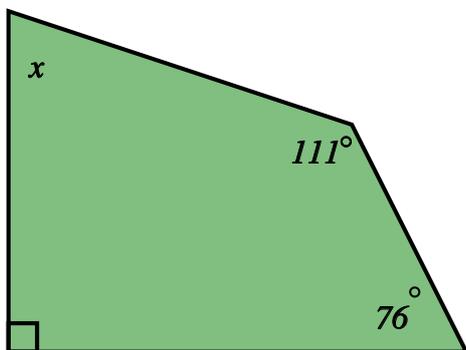
Reason:

Solutions for the assessment Basic angle rules (with reasons)

1) $x = 6°$ (Angles in a right-angle sum to 90°)   **2)** $x = 40°$ (Angles on a straight line sum to 180°)

3) $x = 56°$ (Angles at a point sum to 360)   **4)** $x = 114°$ (Vertically opposite angles are equal)

5) $a = 60°$ (Angles in an equilateral triangle are equal)   **6)** $x = 120°$ (Angles in an equilateral triangle and angles on a straight line)

7) $x = 48°$ (Angle sum of a triangle is 180°)   **8)** $x = 61°$ (Two equal angles in isosceles triangle)

9) $x = 71°$ (Isosceles triangle and angle sum of a triangle)   **10)** $x = 38°$ (Isosceles triangle and angle sum of a triangle)

11) $x = 26°$ (Angle sum of a triangle is 180°)   **12)** $x = 83°$ (Angle sum of a quadrilateral is 360°)