Basic Angle Rules - reasons required in answers

Name:	Class:	Date:

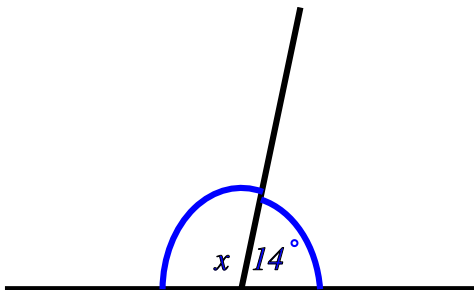| Mark	/ 15	%

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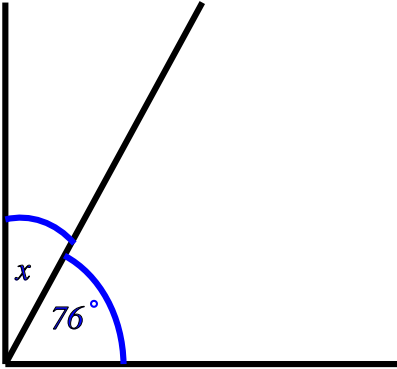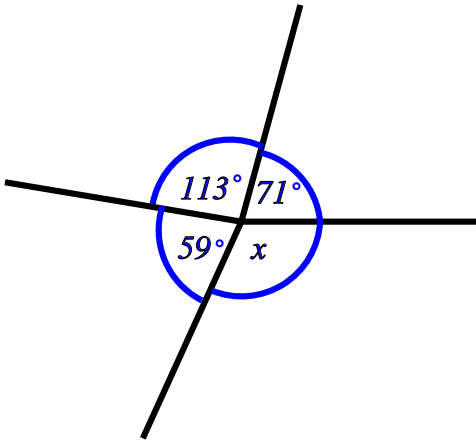

2) Find the value of x, giving a reason for your answer.   [1]
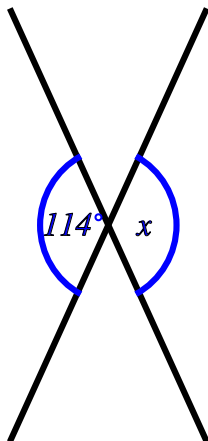
3) Find the value of x, giving a reason for your answer. [1]

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

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

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

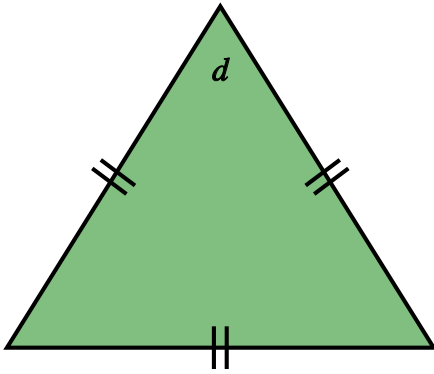**7)** Find the value of x, giving a reason for your answer. [1]

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

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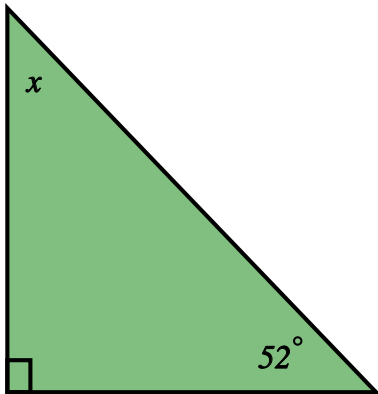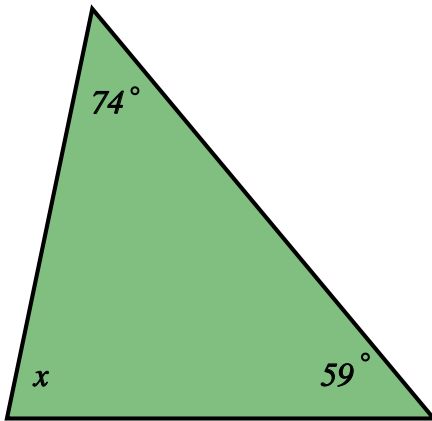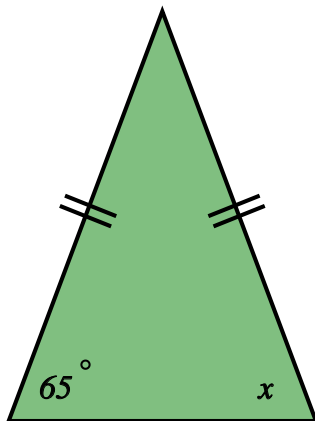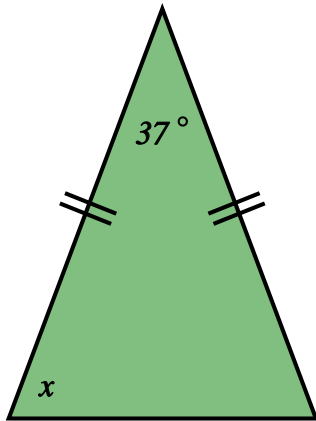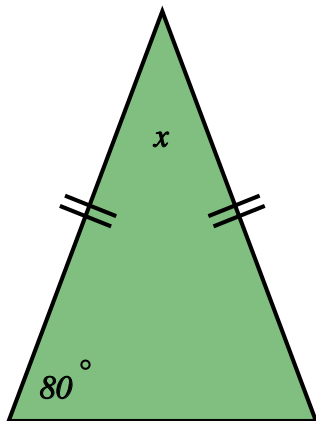

10) Find the value of x, giving reasons for your answer. [1]
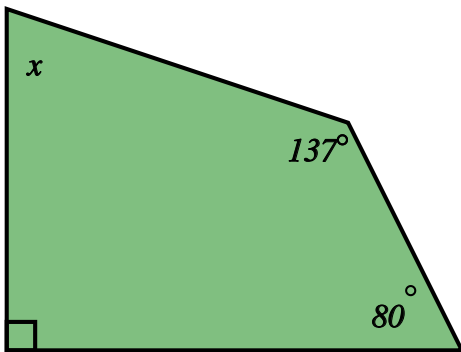
11) Find the value of x, giving a reason for your answer. [1]
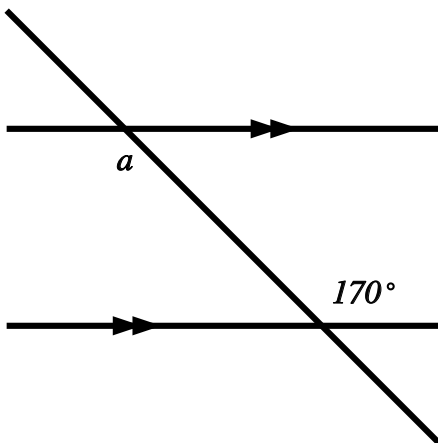

x

137°

80°

12) Find the supplement of the following angle [1]

11°

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

a

170°

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

a

150°
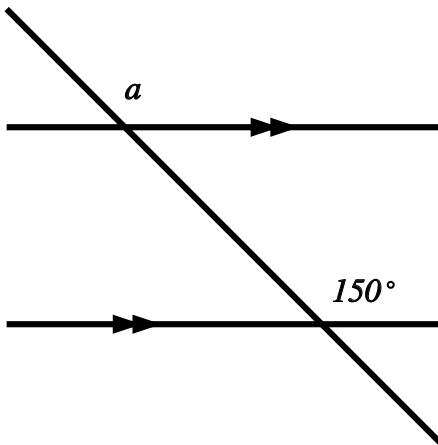
15) Find the value of a, giving a reason for your answer. [1]

a

20°
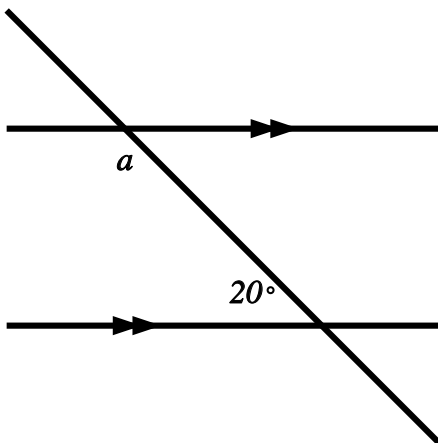
Solutions for the assessment Basic Angle Rules - reasons required in answers

1) $x = 14°$ (Angles in a right-angle sum to 90°)

2) $x = 166°$ (Angles on a straight line sum to 180°)

3) $x = 117°$ (Angles at a point sum to 360)

4) $x = 114°$ (Vertically opposite angles are equal)

5) $d = 60°$ (Angles in an equilateral triangle are equal)

6) $x = 38°$ (Angle sum of a triangle is 180°)

7) $x = 47°$ (Angle sum of a triangle is 180°)

8) $x = 65°$ (Two equal angles in isosceles triangle)

9) $x = 71.5°$ (Isosceles triangle and angle sum of a triangle)

10) $x = 20°$ (Isosceles triangle and angle sum of a triangle)

11) $x = 53°$ (Angle sum of a quadrilateral is 360°)

12) 169°

13) $a = 170°$ (Alternate angles are equal)

14) $a = 150°$ (Corresponding angles are equal)

15) $a = 160°$ (Co-interior angles sum to 180°)