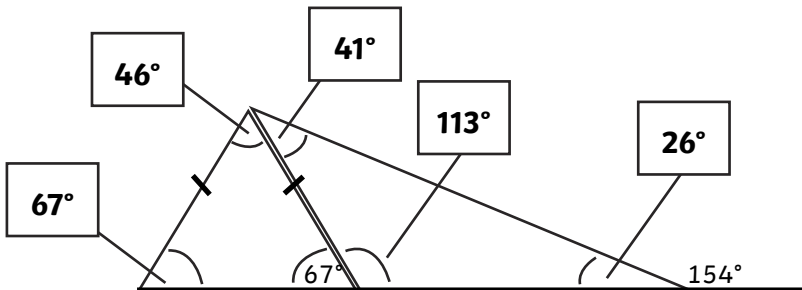




- 1) a) angle $y = 84^\circ$
 angle $z = 57^\circ$
 b) angle $y = 116^\circ$
 angle $z = 52^\circ$
 c) angle $y = 20^\circ$
 angle $z = 93^\circ$
 d) angle $y = 73^\circ$
 angle $z = 326^\circ$
 e) angle $y = 27^\circ$
 angle $z = 63^\circ$

1)



Angles around a point = 360° .

Vertically opposite angles are equal.

Angles on a straight line = 180° .

Angles in a triangle = 180° .

A right angle = 90° .

Isosceles triangles have 2 equal angles.

- 2) a) This is false. Angle y is not vertically opposite the angle measuring 39° .
 b) This is true. Angle x is 49° , which can be found by subtracting 41° and 90° from 180° as angles in a triangle add to 180° .
 c) This is false. Although angle z is one of 5 angles around a point, they are not all equal angles.
- 3) angle $x = 49^\circ$
 angle $y = 51^\circ$
 angle $z = 141^\circ$



1) angle $x = 20^\circ$

angle $y = 120^\circ$

angle $z = 30^\circ$

2) Angle $x = 315^\circ$ as two angles in an isosceles triangle are the same and angles around a point add to 360° .

Angle $y = 341^\circ$ as angles in a triangle add to 180° and angles around a point add to 360° .

Angle $z = 71^\circ$ as angles around a point add to 360° .

3) angle $p = 54^\circ$

angle $q = 54^\circ$

angle $x = 36^\circ$

angle $y = 44^\circ$

angle $z = 59^\circ$