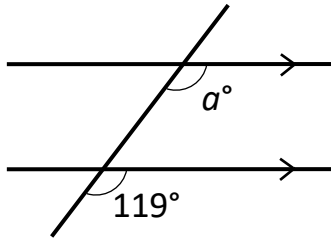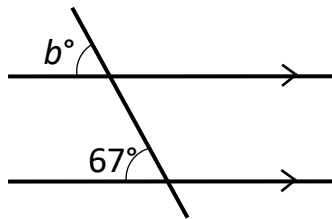**Part A**
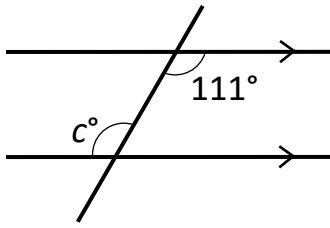
1) What is the size of angle marked *a*? Give reasons for your answer.
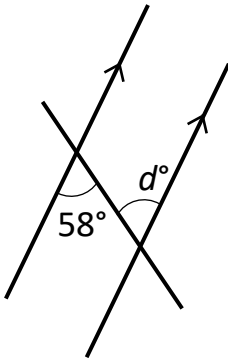

2) What is the size of angle marked *b*? Give reasons for your answer.
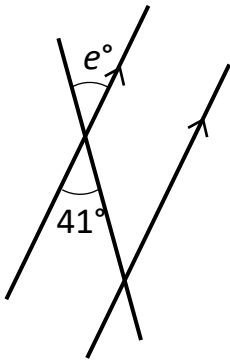
3) What is the size of angle marked *c*? Give reasons for your answer.

111°

c°

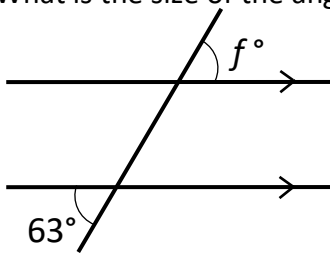4) What is the size of angle marked *d*? Give reasons for your answer.

d°

58°

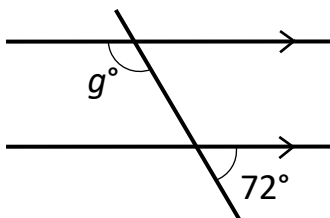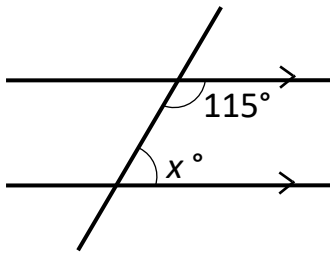5) What is the size of angle marked *e*? Give reasons for your answer.

Part B

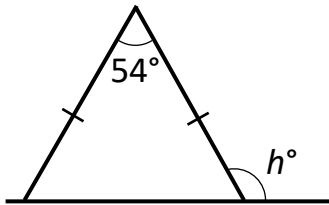1) What is the size of the angle marked *f*? Give reasons for your answer.

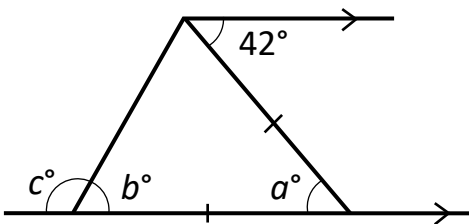2) What is the size of the angle marked *g*? Give reasons for your answer.
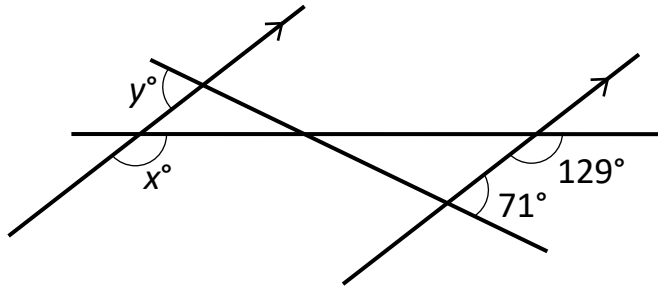
3) What is the size of the angle marked *x*.

115°

x °

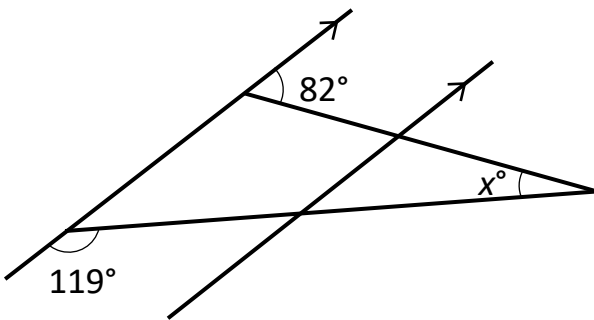4) What is the size of the angle marked *h*? Give reasons for your answer.

54°

h°

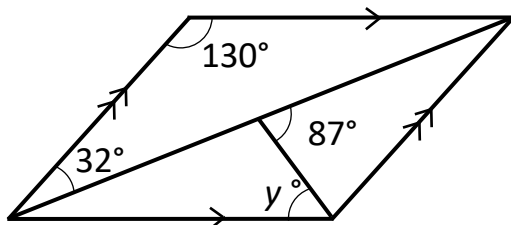5) Find the size of angle *a*, *b* and *c*. Give reasons for your answers.

42°

c° *b*° *a*°

6) Find the size of angle *x* and *y*. Give reasons for your answers.

y°

x°

129°

71°

7) Find the size of the angle marked *x*. Give reasons for your answer.
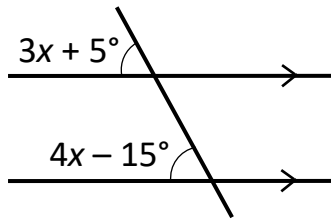
82°

x°

119°

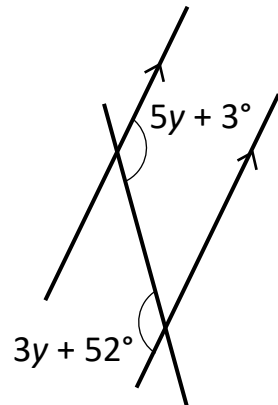8) Find the size of angle *y*. Give reasons for your answer.

130°

87°

32°

y °

Part C
All of the following questions include algebra.
1) Find the value for *x*.

3*x* + 5°

4*x* − 15°

2) Find the value of *y*.

5*y* + 3°

3*y* + 52°

3) Find the value of a.

$4a - 9°$

$2a - 3°$