Practice worksheet | Angles and polygons

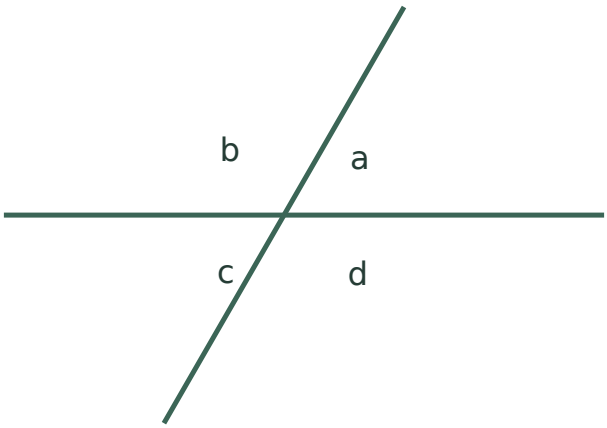
Vertically opposite angles

Name: _____ Date: _____

6 questions | 13 marks

1. Two straight lines cross. One angle is 47°. Find its vertically opposite angle. [1 mark]

2. Use the labelled intersection. Given $a = 130^\circ$, find the following angles. [3 marks]



Two straight lines intersect. Sketch not to scale.

(a) Find b. [1 mark]

(b) Find c. [1 mark]

(c) Find d. [1 mark]

3. Four equal angles meet where two straight lines cross. Find each angle and name the relationship between the lines. [2 marks]

4. Vertically opposite angles are $(4x + 5)^\circ$ and $(6x - 25)^\circ$. Find x and the angle size. [3 marks]

5. Two angles both measure 52°. Does this fact alone prove they are vertically opposite? Explain. [2 marks]

6. Two straight wires cross. The smaller angle between them is 38°. Find the larger angle, giving a reason. [2 marks]