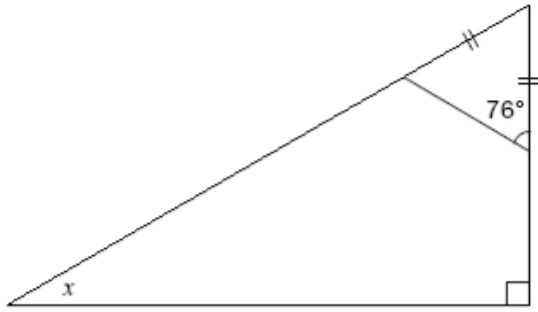


## Geometry Skills

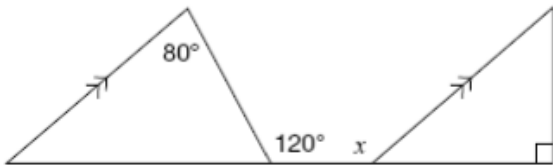
1 Consider the following diagram.



What is the value of  $x$ ?

- a  $14^\circ$
- b  $28^\circ$
- c  $62^\circ$
- d  $76^\circ$

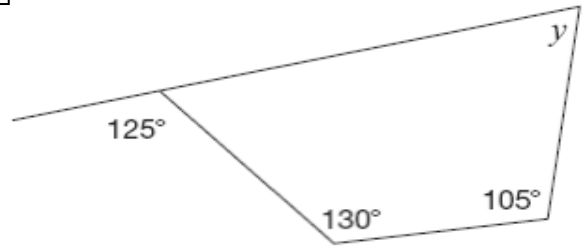
2 Consider the diagram below.



What is the value of  $x$ ?

- a  $80^\circ$
- b  $120^\circ$
- c  $140^\circ$
- d  $170^\circ$

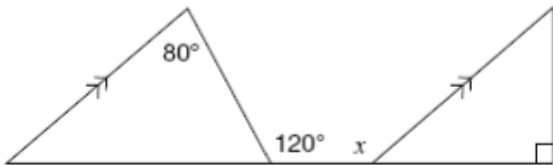
3 Consider the diagram below.



Which of the following is the value of  $y$  in the diagram?

- a  $55^\circ$
- b  $70^\circ$
- c  $125^\circ$
- d  $130^\circ$

2 Consider the diagram below.



What is the value of  $x$ ?

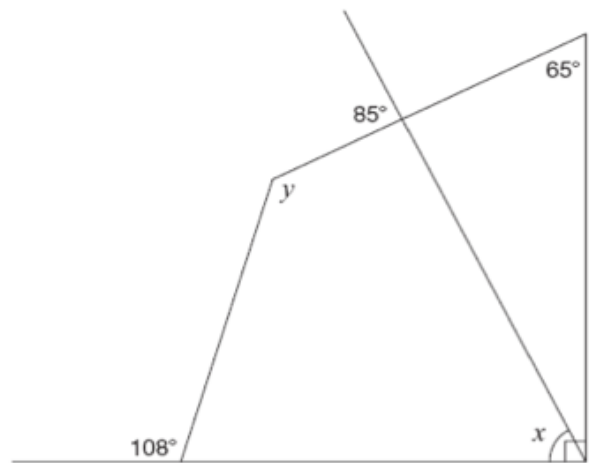
- a  $80^\circ$
- b  $120^\circ$
- c  $140^\circ$
- d  $170^\circ$

4 What is the sum of the interior angles of a 12-sided regular polygon?

- a  $1080^\circ$
- b  $1800^\circ$
- c  $1980^\circ$
- d  $2160^\circ$

A **What's Missing?**

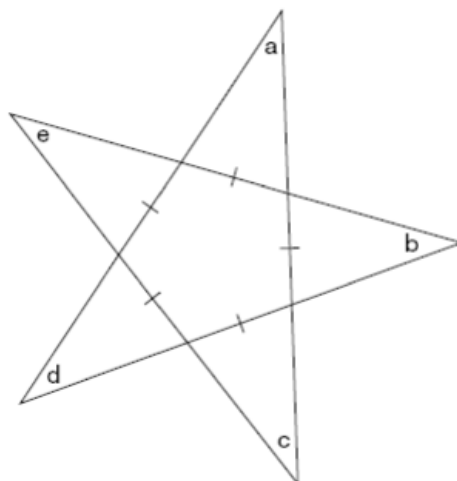
Consider the diagram below.



Determine the values of  $x$  and  $y$ . State your reasons.

B **Twinkle Twinkle**

Nicole notices the star design shown below on the pavement outside a movie theatre.



Determine the sum of the angle measures in the corners of this star:  $a + b + c + d + e$ .

Justify your answer using geometric properties.