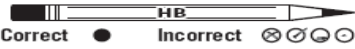


Name: \_\_\_\_\_

## Geometric Relationships

### Student Answer Sheet

- Use an HB pencil only.
- Make heavy black marks that fill the circle completely.
- Cleanly erase any answer you wish to change.



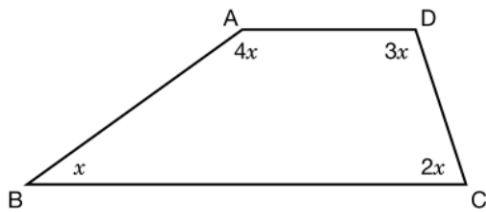
1. (A) (B) (C) (D)
2. (A) (B) (C) (D)
3. (A) (B) (C) (D)
4. (A) (B) (C) (D)
5. (A) (B) (C) (D)
6. (A) (B) (C) (D)
7. (A) (B) (C) (D)
8. (A) (B) (C) (D)
9. (A) (B) (C) (D)
10. (A) (B) (C) (D)
11. (A) (B) (C) (D)
12. (A) (B) (C) (D)
13. (A) (B) (C) (D)
14. (A) (B) (C) (D)
15. (A) (B) (C) (D)



Please answer the multiple choice questions below on the bubble sheet and hand-in your completed work.

Show **and justify** your work in the area provided.

ABCD is a quadrilateral

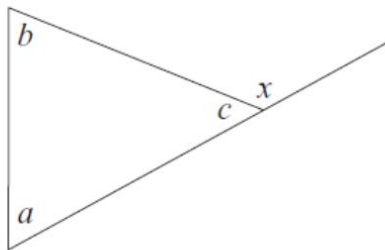


What is the measure of  $\angle BAD$ ?

- F  $108^\circ$
- G  $120^\circ$
- H  $132^\circ$
- J  $144^\circ$

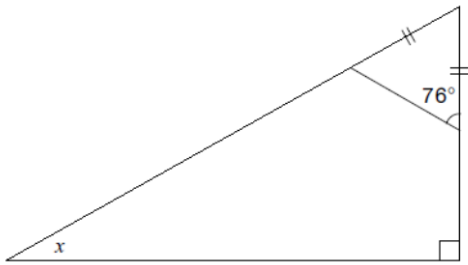
Consider the diagram below.

Which of the following equations is always true?



- a  $x = a + b$
- b  $x = b + c$
- c  $x = a - b$
- d  $x = b - c$

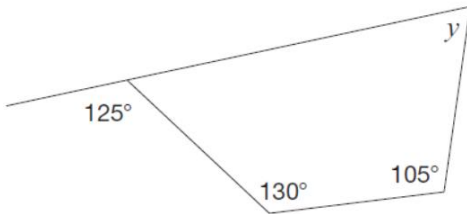
Consider the following diagram.



What is the value of  $x$ ?

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

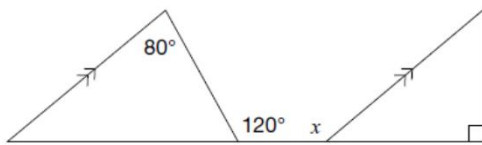
Consider the diagram below.



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

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

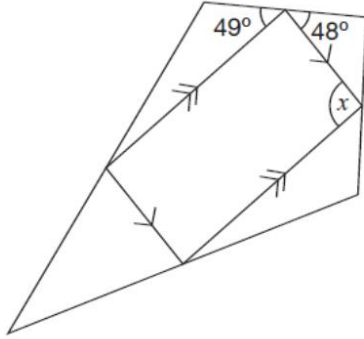
Consider the diagram below.



What is the value of  $x$ ?

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

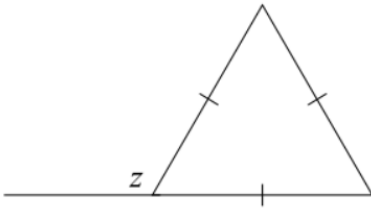
A parallelogram is inscribed in a quadrilateral as shown.



What is the value of  $x$ ?

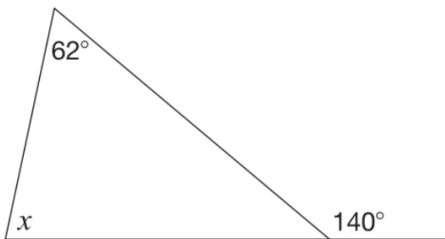
- a  $48^\circ$
- b  $49^\circ$
- c  $83^\circ$
- d  $97^\circ$

What is the value  $z$  in the diagram below?



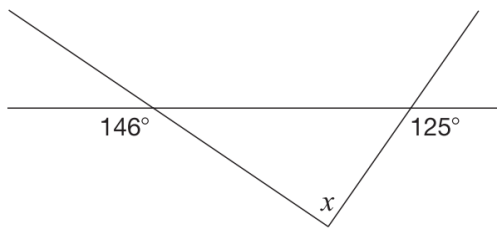
- a  $60^\circ$
- b  $100^\circ$
- c  $120^\circ$
- d  $140^\circ$

What is the value of  $x$  in the diagram below?



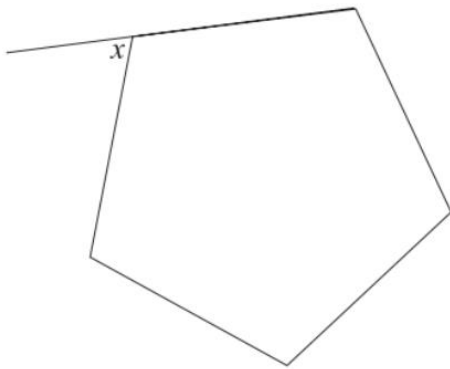
- a  $40^\circ$
- b  $62^\circ$
- c  $78^\circ$
- d  $118^\circ$

What is the value of  $x$  in the diagram below?



- a  $91^\circ$
- b  $89^\circ$
- c  $55^\circ$
- d  $34^\circ$

A regular pentagon is shown below.



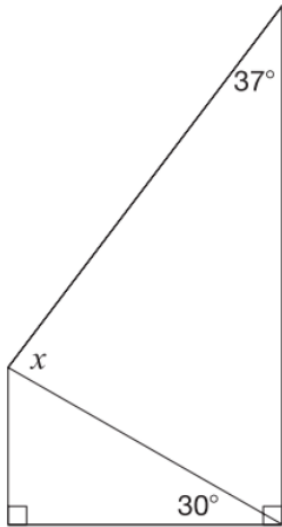
What is the value of  $x$ ?

- a  $60^\circ$
- b  $72^\circ$
- c  $108^\circ$
- d  $180^\circ$

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

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

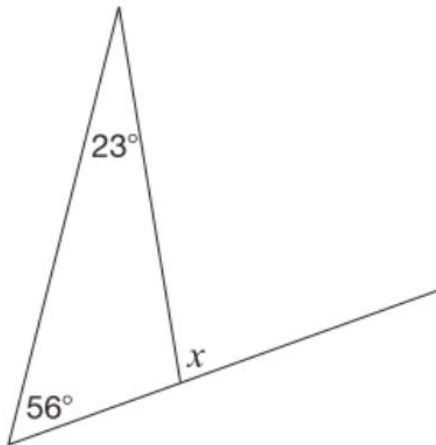
Consider the diagram below.



What is the value of  $x$  in the diagram?

- a  $30^\circ$
- b  $53^\circ$
- c  $60^\circ$
- d  $83^\circ$

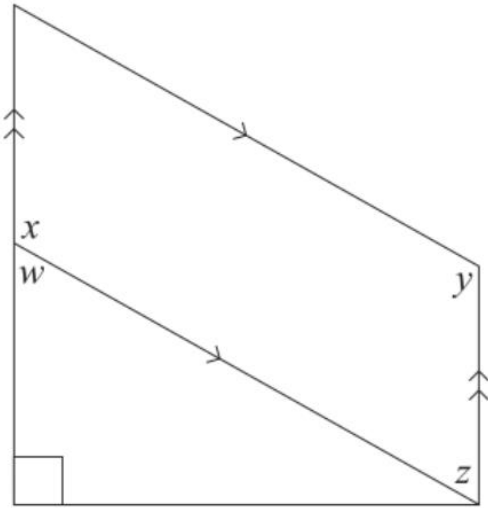
Consider the diagram below.



What is the value of  $x$ ?

- a  $23^\circ$
- b  $56^\circ$
- c  $79^\circ$
- d  $101^\circ$

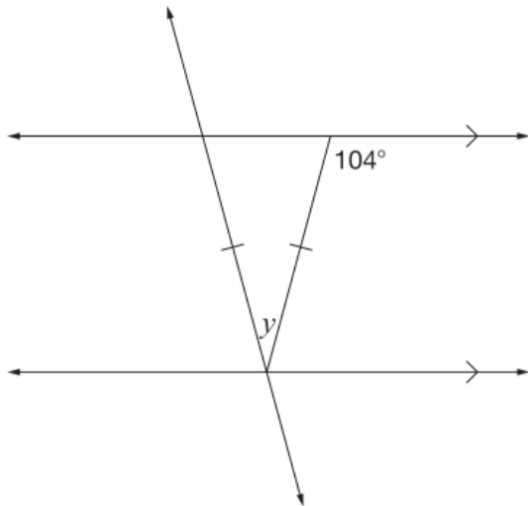
Consider the diagram below.



Which equation is true?

- a  $x = z$
- b  $w = y$
- c  $y + z = 180^\circ$
- d  $w + z = 180^\circ$

Consider the diagram below.



What is the value of  $y$ ?

- a  $28^\circ$
- b  $76^\circ$
- c  $104^\circ$
- d  $152^\circ$