# What's Going On?

**Checking In**

**Minds on** One Last Thing...

**Action!** Takin' It Up

**Consolidation** Jeopardy?

**Learning Goal - I will review my Geometric Relationships!**

## Checking In

# This Week!

Monday - Review

Tuesday - More Review!

Wednesday - Test

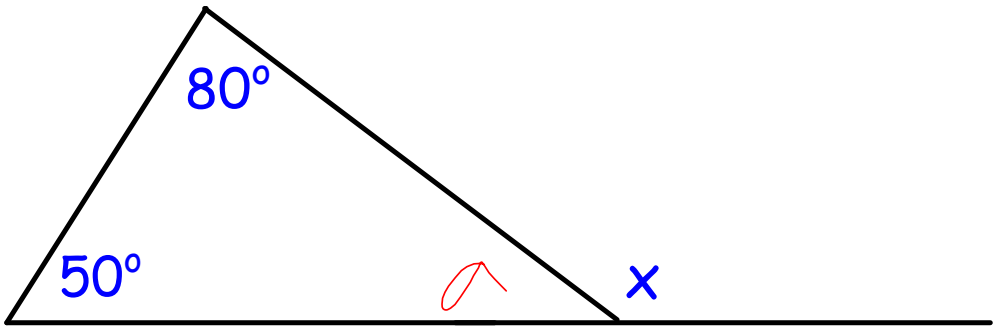
Thursday - Pythagorean Theorem

Friday - Composite Figures

## Minds on

# One Last Little Thing

**Find the measure of angle x**




$a = 180 - 80 - 50$
$= 50°$ by IAT

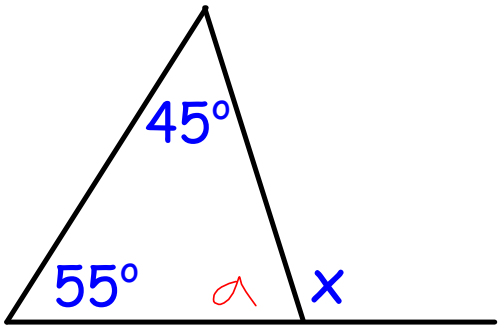
$x = 180 - 50$
$= 130°$ by SAT

$\therefore x = 130°$

## Minds on

# One Last Little Thing

**Find the measure of angle x**




$a = 180 - 55 - 45$

$a = 80°$ by IAT

$x = 180 - 80$

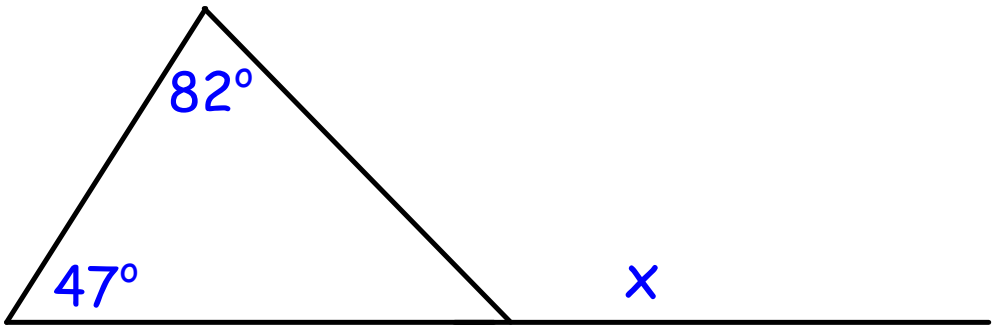
$x = 100°$ by SAT

$\therefore x = 100°$

## Minds on

# One Last Little Thing

**Find the measure of angle x**



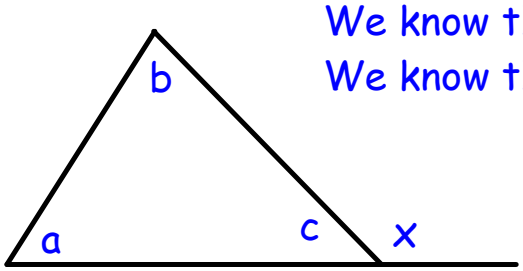

$x = 129^\circ$

by IAT + SAT

## Minds on

# One Last Little Thing

**Find the measure of angle x**



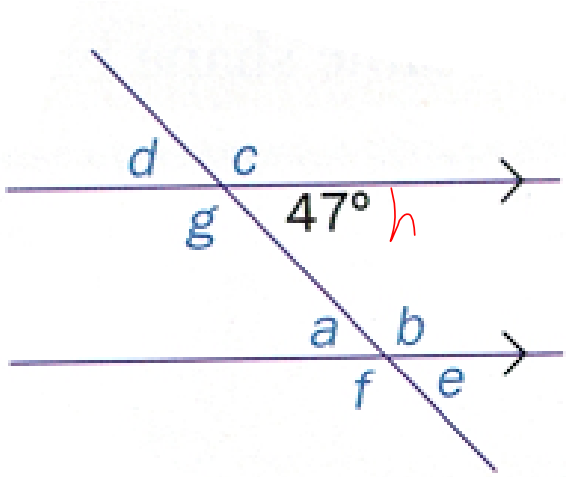

We know that a + b + c = 180 (IAT)
We know that c + x = 180 (SAT)

$c + x = a + b + c$
$-c \quad\quad -c$
$x = a + b$

**The exterior angle at each vertex of a triangle is equal to the sum of the interior angles at the other two vertices.**

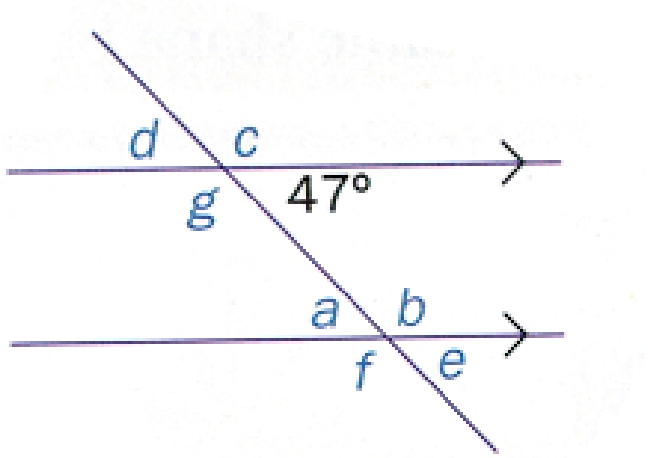
Action!

# Solving and Justifying




Using the diagram above, identify two pairs of:

| Opposite Angles | Alternate Angles |
|---|---|
| d & h  c & g  b & f  a & e | a & h  g & b |
| **Corresponding Angles** | **Co-Interior Angles** |
| f & g  e & h  b & c  a & d | a & g  h & b |

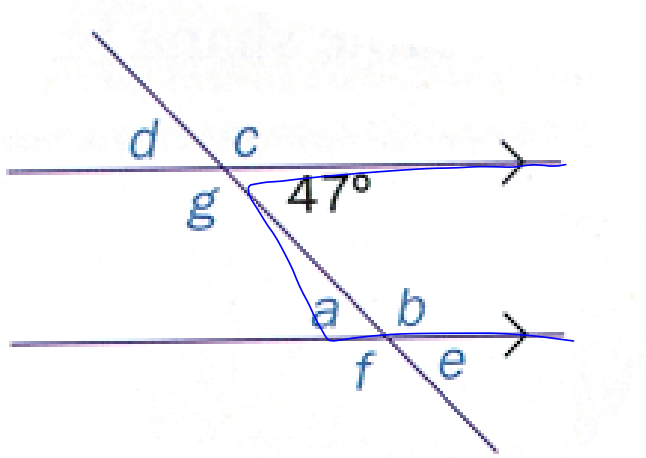



Determine the measure of $\angle a$

$47^\circ$

What Theorem Did You Use?

Z alternate

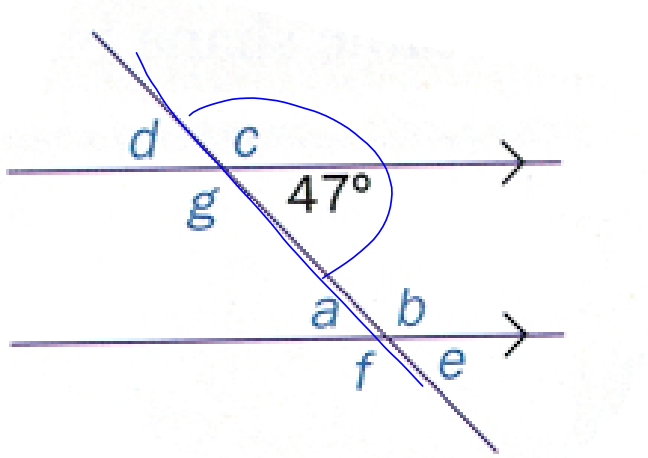



Determine the measure of b

133°

What Theorem Did You Use?

Co interior

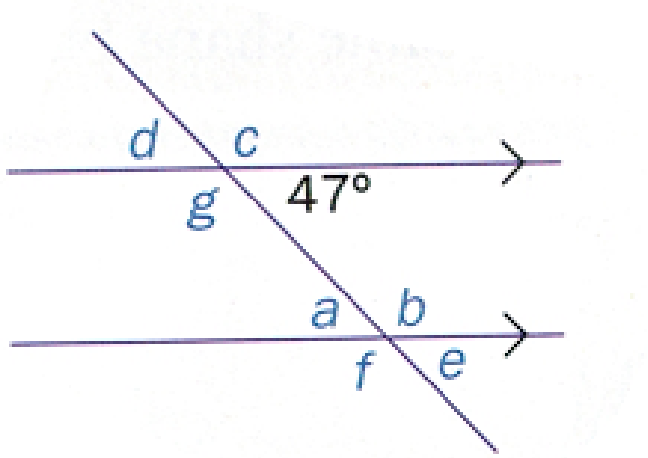



Determine the measure of $\angle$ ___

133°

What Theorem Did You Use?

SAT

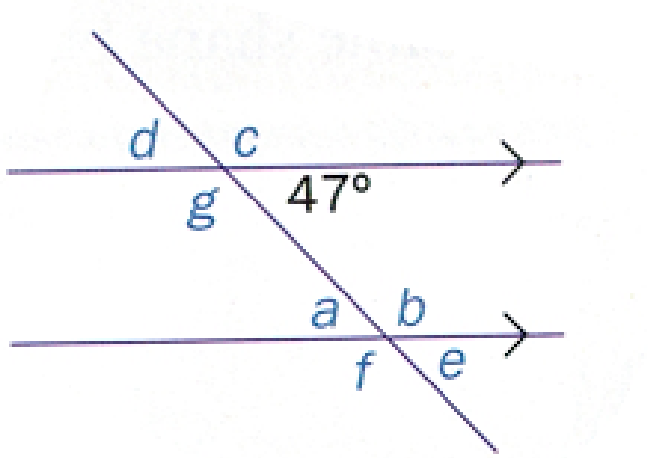



Determine the measure of d

47°

What Theorem Did You Use?

OAT

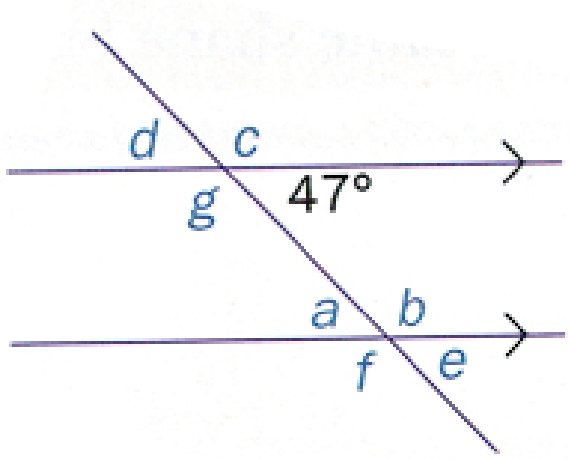



Determine the measure of e

47°

What Theorem Did You Use?

F - corresponding



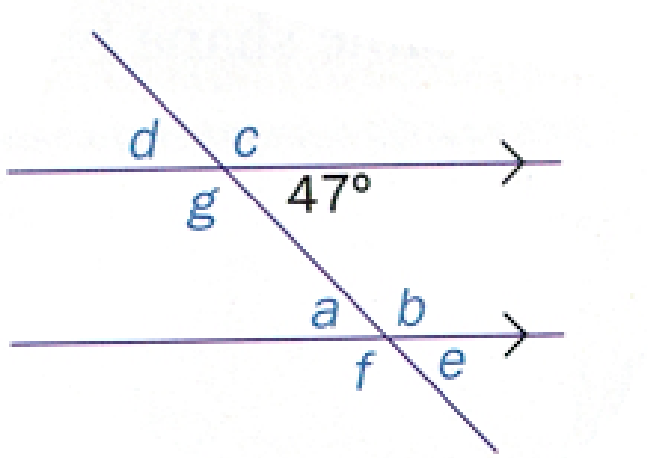

Determine the measure of f

133°

What Theorem Did You Use?

b → ∠ interior
f → opposite

∠ - ∠ alternate
f - SAT

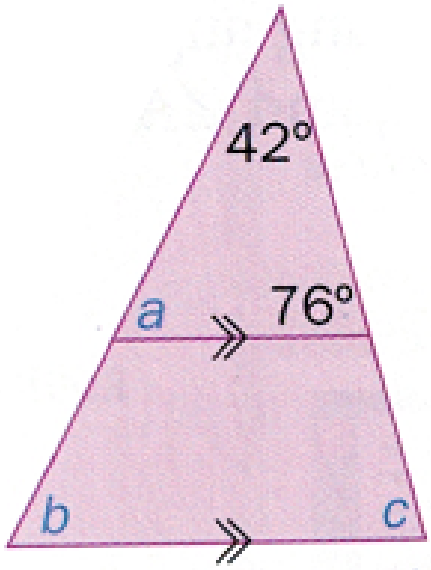



Determine the measure of $\underline{g}$

$133^\circ$

What Theorem Did You Use?

SAT



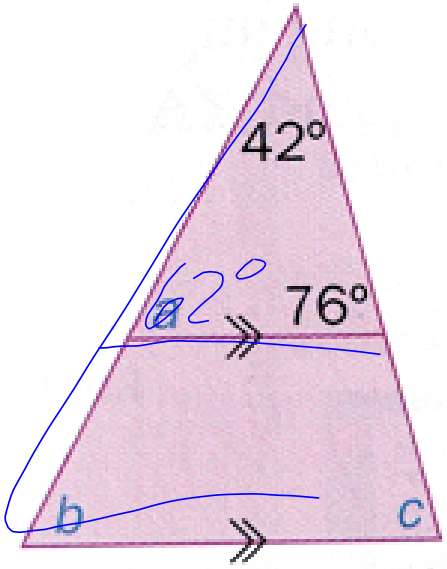

Determine the measure of angle a.

$180 - 42 - 76$
$= 62°$

$a = 62°$

What Theorem Did You Use?

by IAT

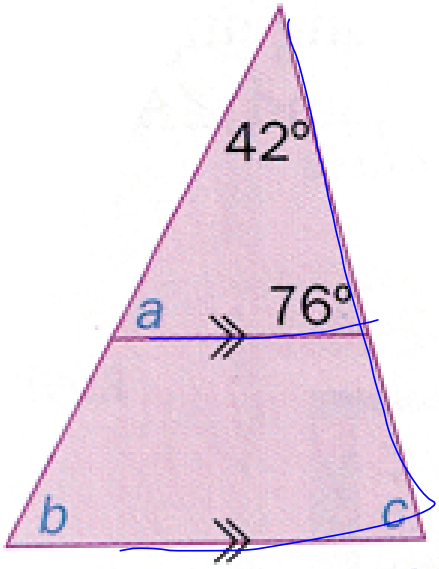



Determine the measure of angle b.

62°

What Theorem Did You Use?

F - corresponding

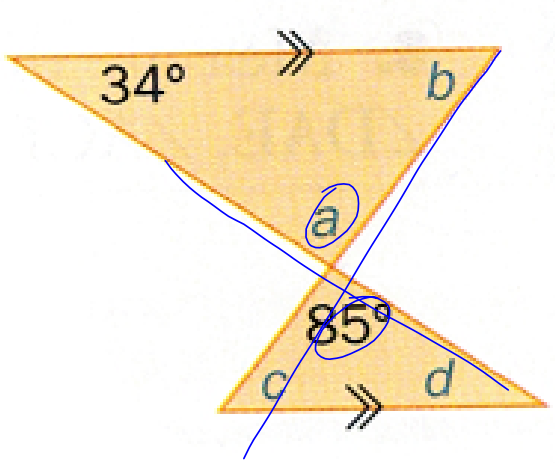



Determine the measure of angle c.

76°

What Theorem Did You Use?

F - corresponding

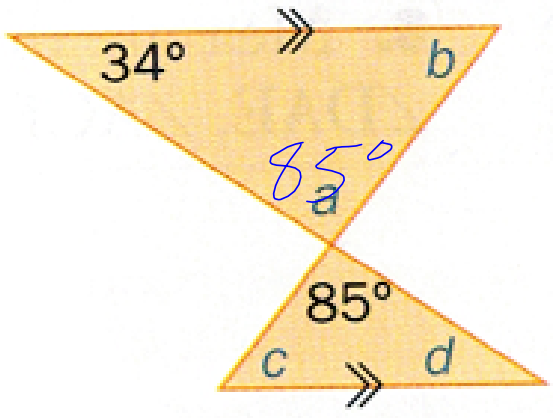



Determine the measure of angle a.

85°

What Theorem Did You Use?

OAT



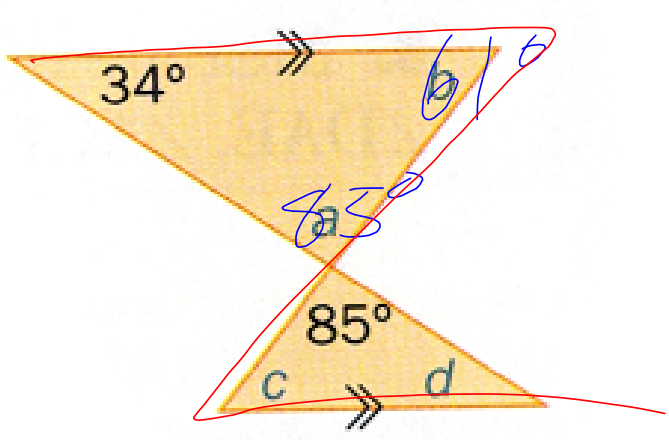

Determine the measure of angle b.

$180 - 85 - 34$
$= 61$

$b = 61°$

What Theorem Did You Use?

IAT

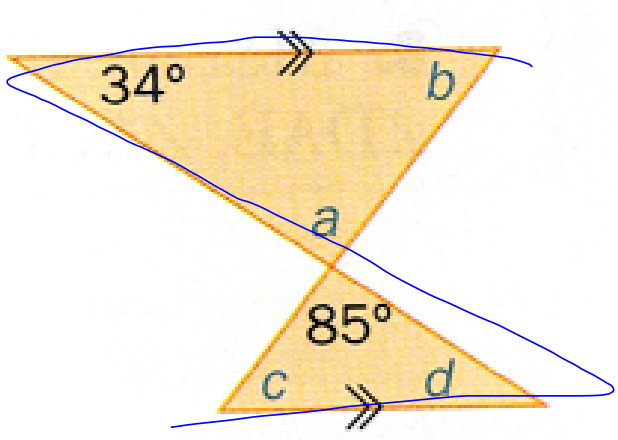



Determine the measure of angle c.

61°

What Theorem Did You Use?

Z - Alternates

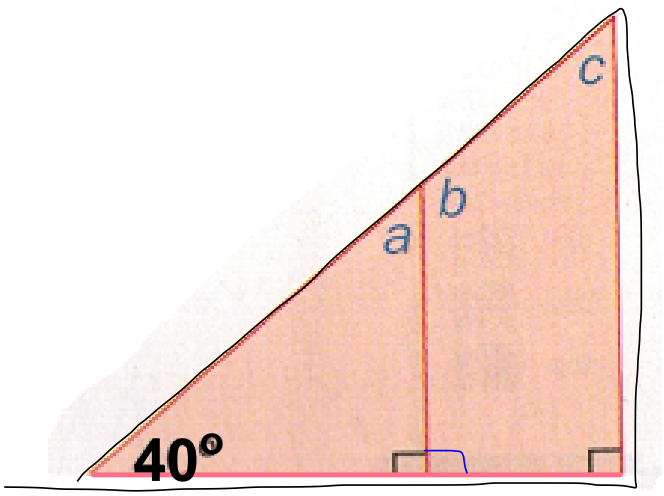



Determine the measure of angle d.

34°

What Theorem Did You Use?

Z alternates



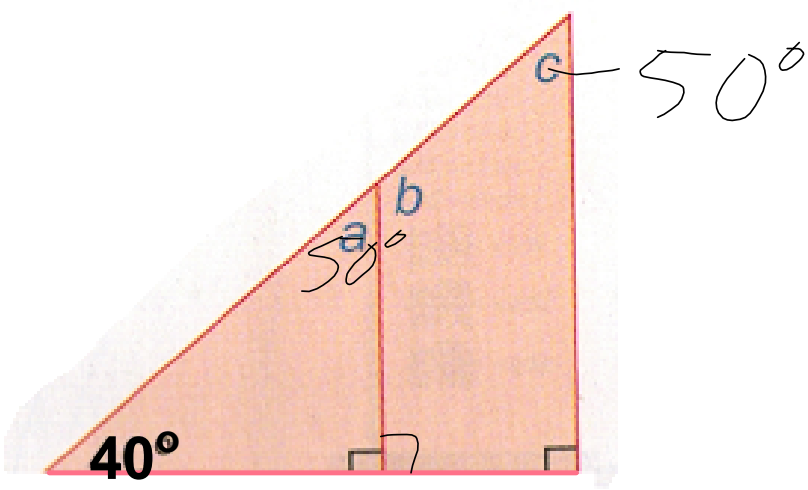

Determine the measure of angle a.

180 - 40 - 90

a = 50° by IAT

What Theorem Did You Use?

IAT



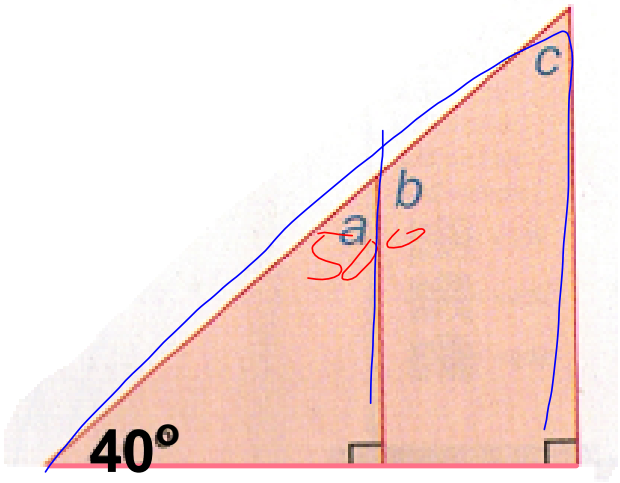

Determine the measure of angle b.

180 - 50

b = 130°

What Theorem Did You Use?

SAT

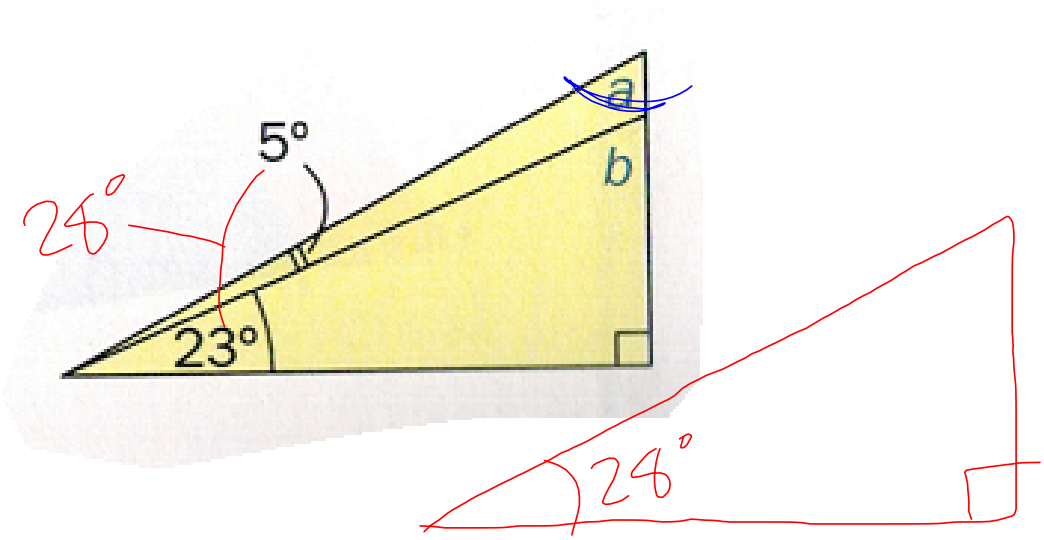



Determine the measure of angle c.

50°

What Theorem Did You Use?

F corresponding



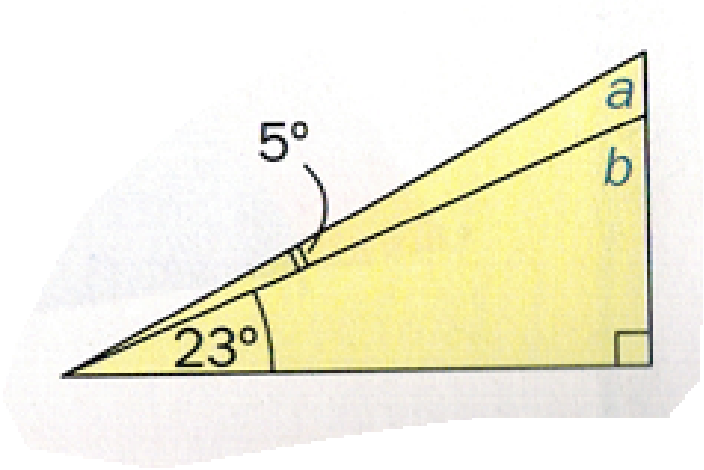

Determine the measure of angle a.

140 - 90 - 23 - 5

62°

What Theorem Did You Use?

IAT



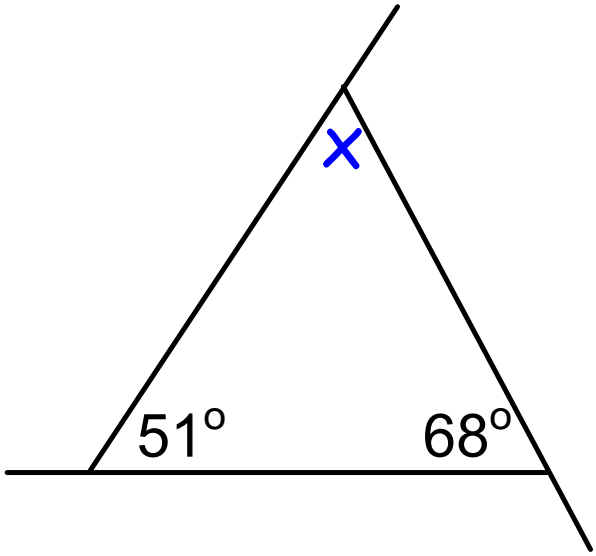

Determine the measure of angle b.

180-90-23

b=67°

What Theorem Did You Use?

IAT

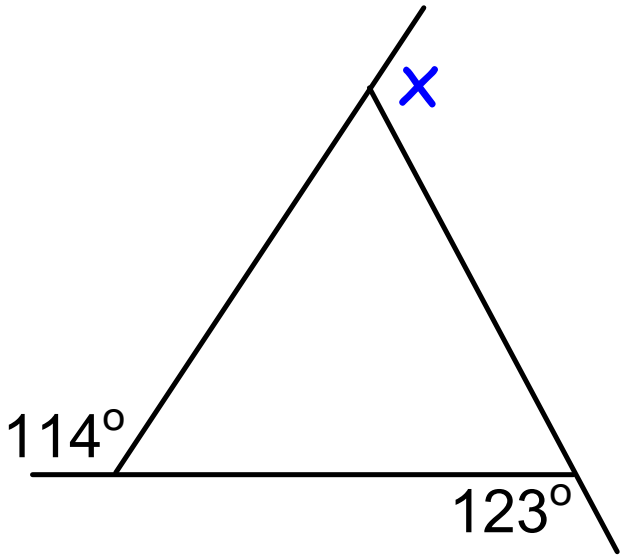



Determine the measure of angle x.

61°

What Theorem Did You Use?

IAT



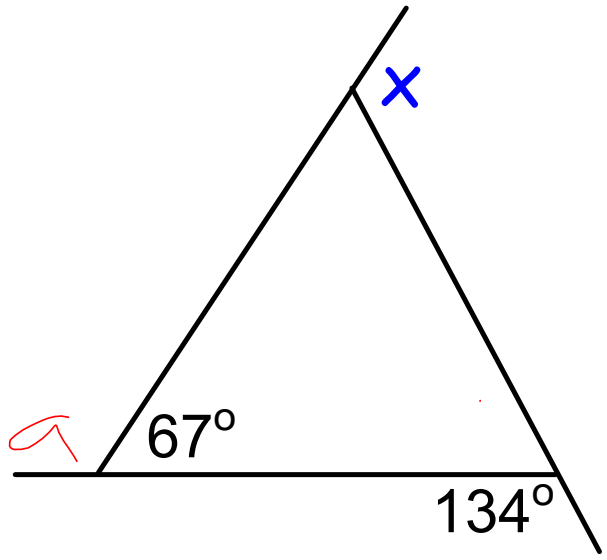

Determine the measure of angle x.

360 - 114 - 123

123°

What Theorem Did You Use?

EAT

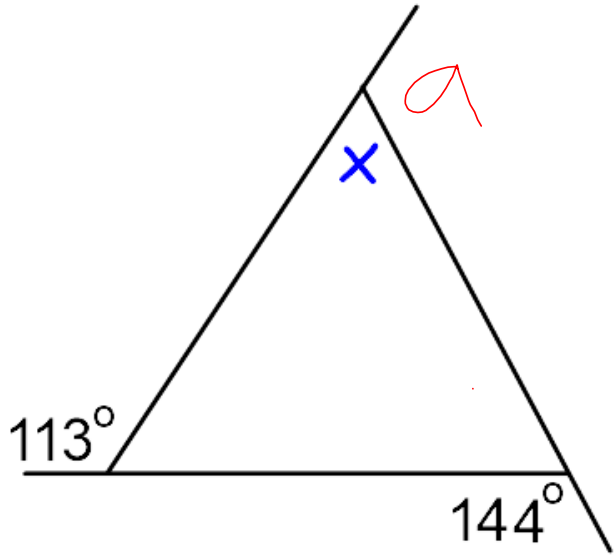



Determine the measure of angle x.

113°

What Theorem Did You Use?

SAT → EAT




Determine the measure of angle x.

$x = 77°$

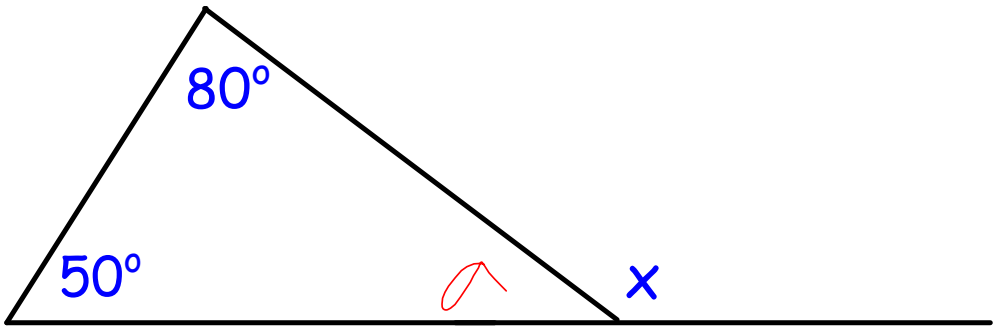
What Theorem Did You Use?

a: EAT
x: SAT

## Minds on

# One Last Little Thing

**Find the measure of angle x**




$a = 180 - 80 - 50$
$= 50°$ by IAT

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$\therefore x = 130°$

## Minds on

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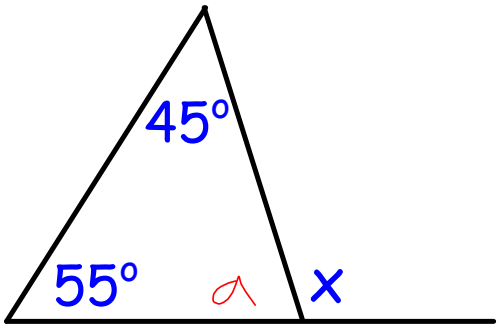


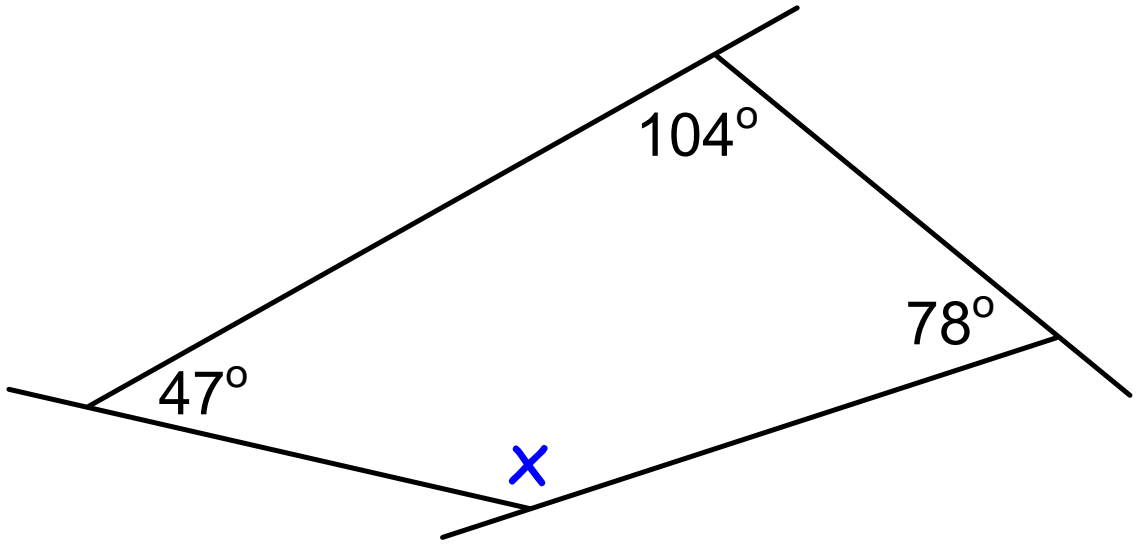

$a = 180 - 55 - 45$

$a = 80°$ by IAT

$x = 180 - 80$

$x = 100°$ by SAT

$\therefore x = 100°$

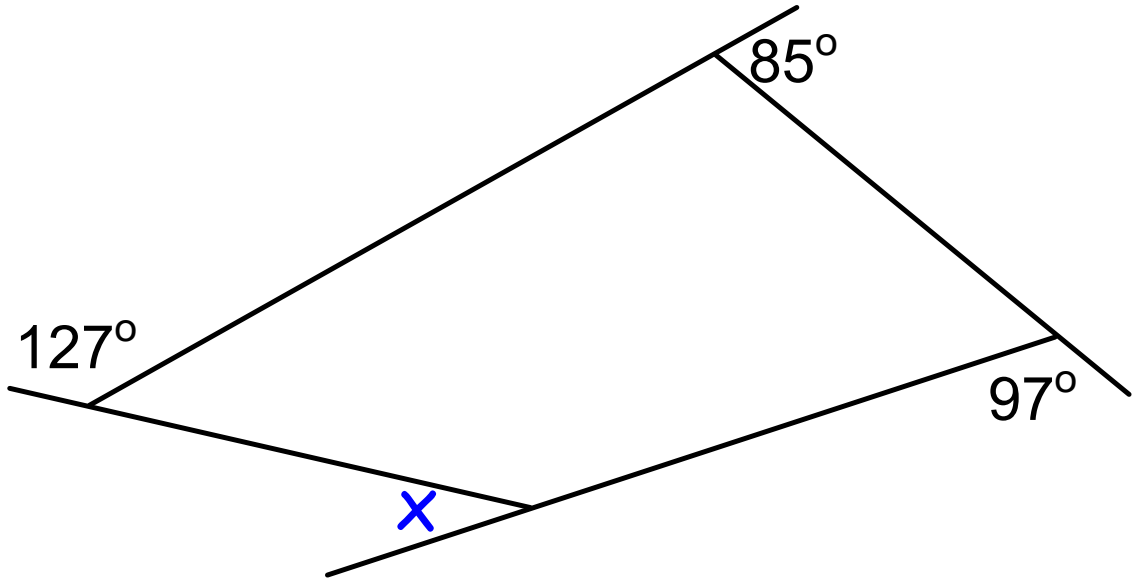



Determine the measure of angle x.

131°

What Theorem Did You Use?

IAT

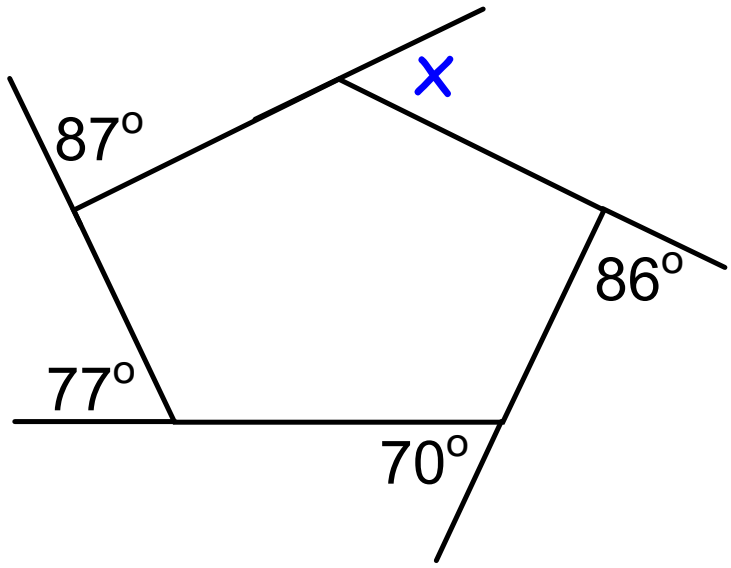



Determine the measure of angle x.

$x = 51°$

What Theorem Did You Use?

EAT

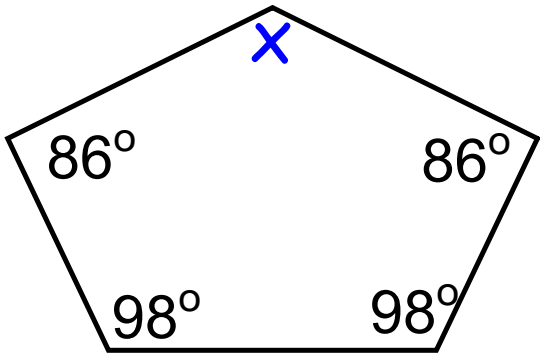



Determine the measure of angle x.

40°

What Theorem Did You Use?

EAT




Determine the measure of angle x.

$S = 180(n-2)$

$S = 180(3)$

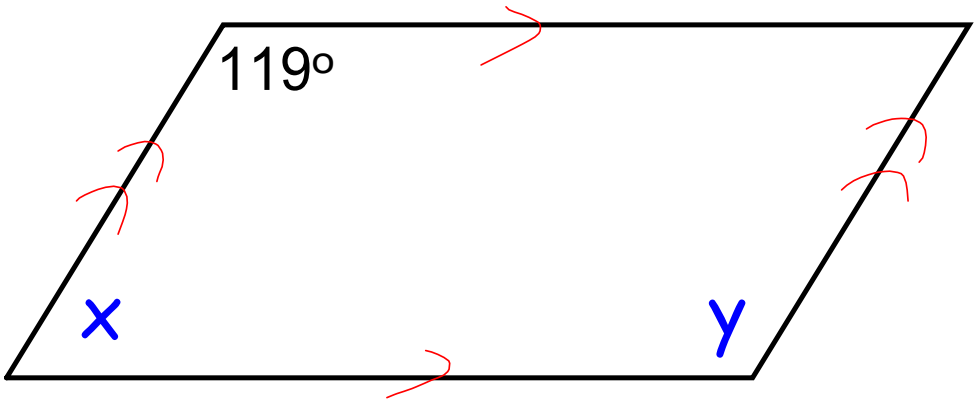
$S = 540^\circ$

$540 - 86 - 86 - 94 - 94$

$x = 172^\circ$

What Theorem Did You Use?

IAT




Determine the measure of angle x and y.

What Theorems Did You Use?

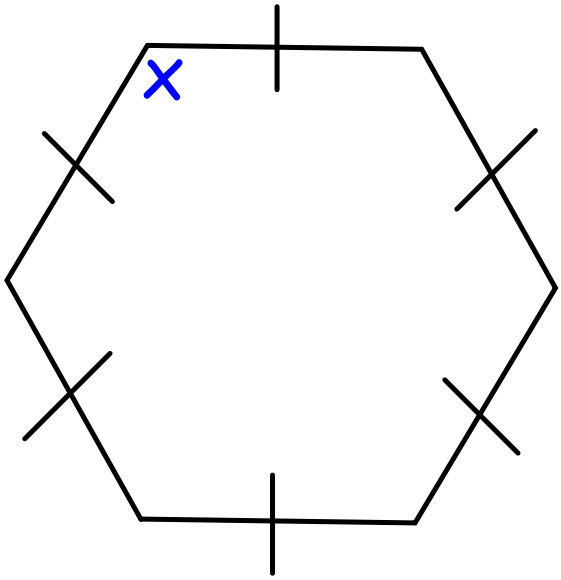
$x = 180 - 119$

$= 61^\circ$

co-interior

$y = 119^\circ$

opposite angles in parallelogram




Determine the measure of angle x.

What Theorem Did You Use?

$S = 180(n-2)$

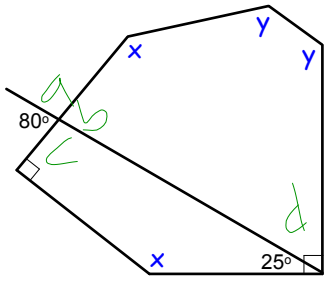
$S = 180(6-2)$

$S = 720°$

→ IAT

$\frac{720}{6}$ → regular polygon

$x = 120°$




Determine the measure of angle x and y.

a: 100° by SAT
b: 40° by OAT
c: 100° by SAT or OAT

$x = 360 - 90 - 100 - 25$
$= 145°$ by IAT

---

d: 65° by CAT

$S = 180(5-2)$
$= 540°$ by IAT

$540 - 90 - 65 - 145$
$= 250$

$\frac{250}{2} = 125$

because same angle

$\therefore y = 125°$

## Consolidation

Assignment Return