May 4, 2026

Google Classroom

# Notebook Check

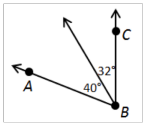
May 4, 2026

# Homework Questions?

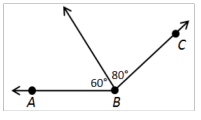
## Angles, Angles, Everywhere!

**Find the measure of ∠*ABC*.**

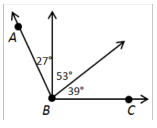
1. $m\angle ABC =$ 72°



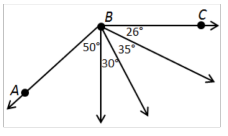

2. $m\angle ABC =$ 140°




3. $m\angle ABC =$ 119°

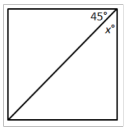



4. $m\angle ABC =$ 141°

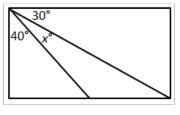



**Find the value of *x*.**

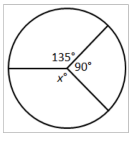
5. $x =$ 90-45 = 45°



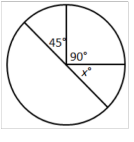

6. $x =$ 90-70 = 20°




7. $x =$ 360-(135+90) = 135°



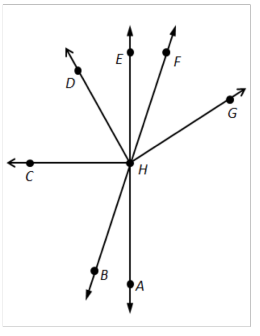

8. $x =$ 180-(90+45) = 45°



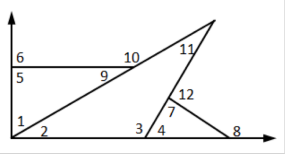

## Classifying Angles

**Tell if the angle appears to be *acute*, *right*, *obtuse*, or *straight*.**

1. ∠*CHF* Obtuse
2. ∠*CHA* Right
3. ∠*EHF* Acute
4. ∠*DHC* Acute
5. ∠*BHF* Straight
6. ∠*BHA* Acute
7. ∠*EHG* Acute
8. ∠*CHG* Obtuse
9. ∠*AHE* Straight
10. ∠*GHA* Obtuse




**Write each numbered angle in the correct column. Two are done for you.**




| Acute Angles | Right Angles | Obtuse Angles |
|---|---|---|
| ∠1 ∠9 ∠2 ∠11 ∠4 | ∠5 ∠7 ∠6 ∠12 | ∠3 ∠10 ∠8 |



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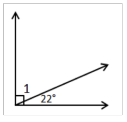
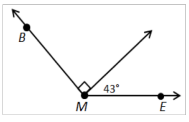
## Missing Measures

**Find the angle measure.**

**1.** $m\angle 1 =$ 90 − 22 = 68°

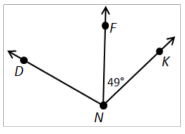



**2.** $m\angle BME =$ 90 + 43 = 133°

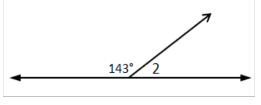



**3.** $m\angle DNK = 110°$

$m\angle DNF =$ 110 − 49 = 61°



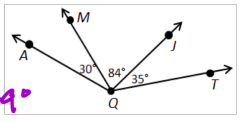

**4.** $m\angle 2 =$ 180 − 143 = 37°




**5.** $m\angle AQJ =$ 30 + 84 = 114°

**6.** $m\angle MQT =$ 84 + 35 = 119°

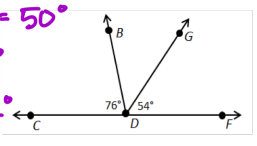
**7.** $m\angle AQT =$ 30 + 84 + 35 = 149°




**8.** $m\angle BDG =$ 180 − (76 + 54) = 50°

**9.** $m\angle CDG =$ 180 − 54 = 126°

**10.** $m\angle BDF =$ 180 − 76 = 104°






## Working With Adjacent Angles

**Correctly answer each question below.**

1) What is the adjacent angle to ∠BAC?

∠CAD

2) What is the adjacent angle to ∠BAD?

∠DAE

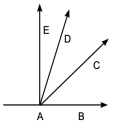
3) What is the adjacent angle to ∠CAE?

∠CAB

4) What two angles are adjacent angles to ∠CAD?

∠EAD and ∠CAB

**Figure A.**

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1) What are the two adjacent angles to ∠3?

∠2 and ∠4

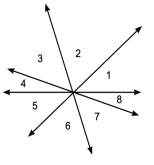
2) What is the smallest adjacent angle to ∠7?

∠8

3) What are the adjacent angles to ∠5?

∠4 and ∠6

**Figure B.**






**Adjacent:** Next to

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# Working With Complementary Angles

Part 1: Give the measurement for the complementary angle for each angle below.

A) 45° 90-45=45°

B) 30° 90-30=60°

C) 20° 90-20=70°

D) 80° 90-80=10°

E) 55° 90-55=35°

F) 62° 90-62=28°

G) 89° 90-89=1°

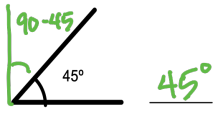
H) 77° 90-77=13°

I) 38° 90-38=52°

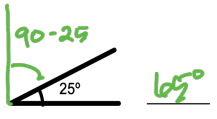
J) 5° 90-5=85°

Part 2: For each figure below, draw the complementary angle and label its measurement

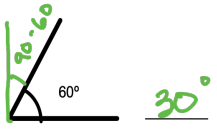
A)



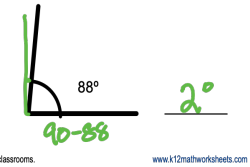

B)




C)




D)








**Complementary:** Sum = 90°

# Working With Supplementary Angles

**Part 1:** Give the measurement for the supplementary angle for each angle below.

A) 60° 180-60=120°

B) 110° 180-110=70°

C) 45° 180-45=135°

D) 90° 180-90=90°

E) 150° 180-150=30°

F) 25° 180-25=155°

G) 170° 180-170=10°

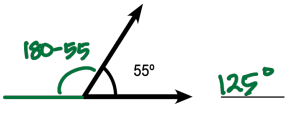
H) 82° 180-82=98°

I) 39° 180-39=141°

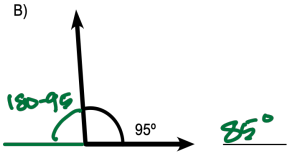
J) 107° 180-107=73°

**Part 2:** For each figure below, draw the supplementary angle and label its measurement

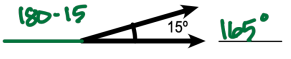
A)




B)




C)

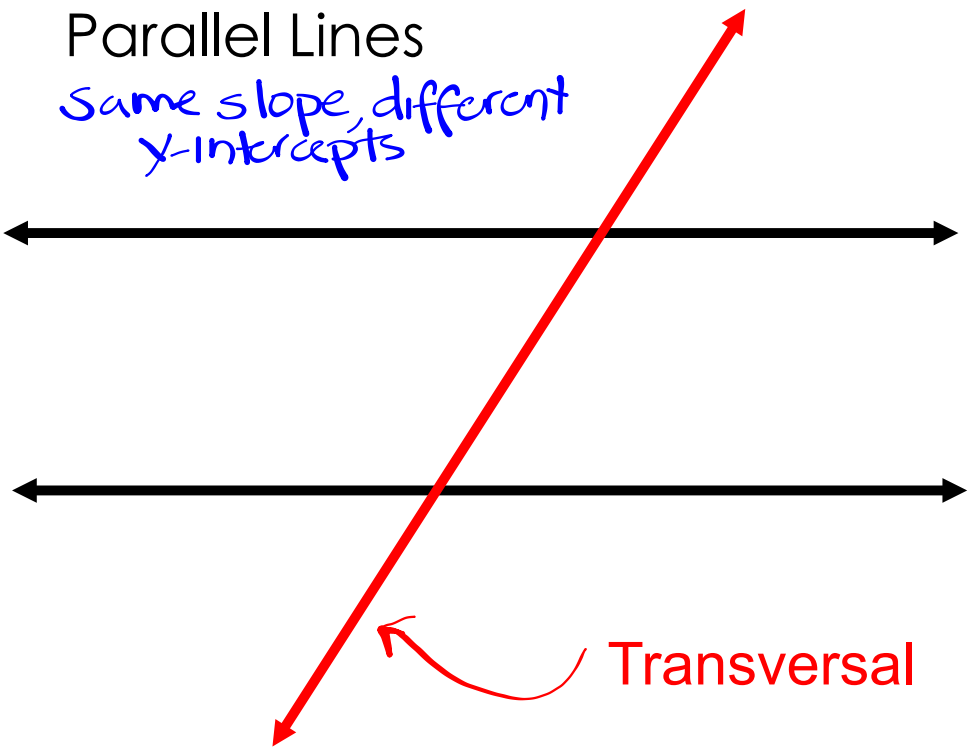



D)

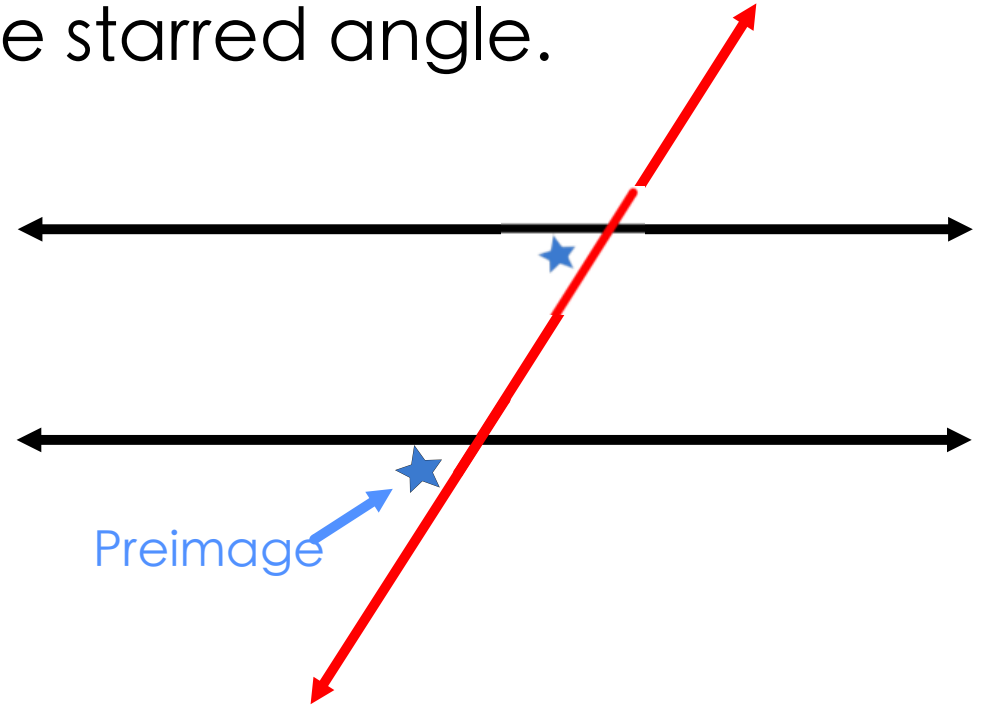




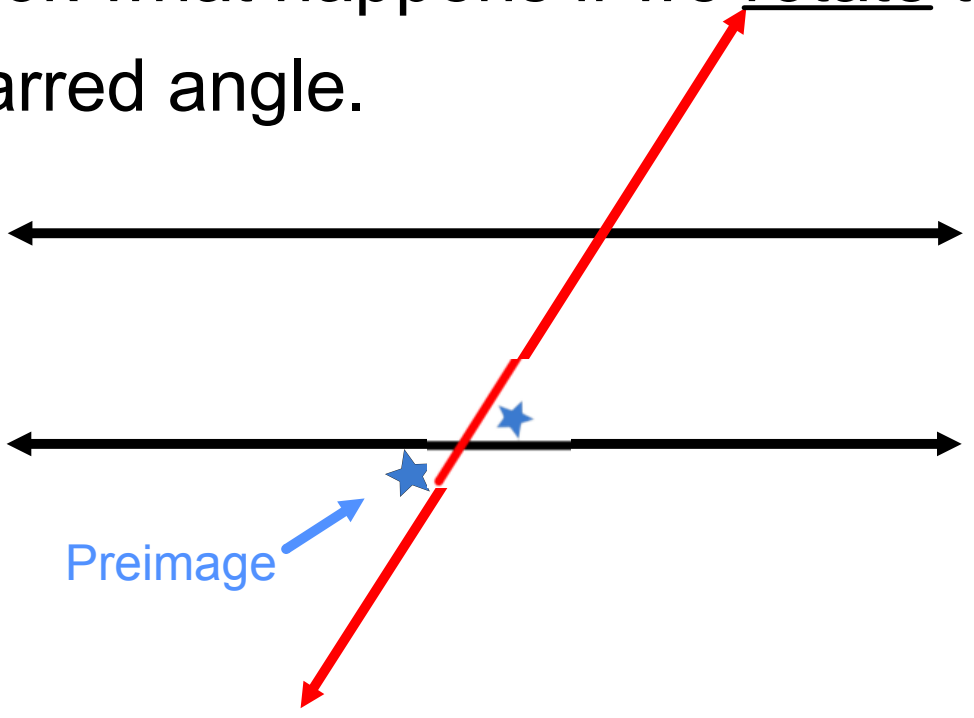

**Supplementary:** Sum = 180°


Parallel Lines
same slope, different y-intercepts
Transversal

Look what happens if we <u>translate</u> the starred angle.



Look what happens if we rotate the starred angle.



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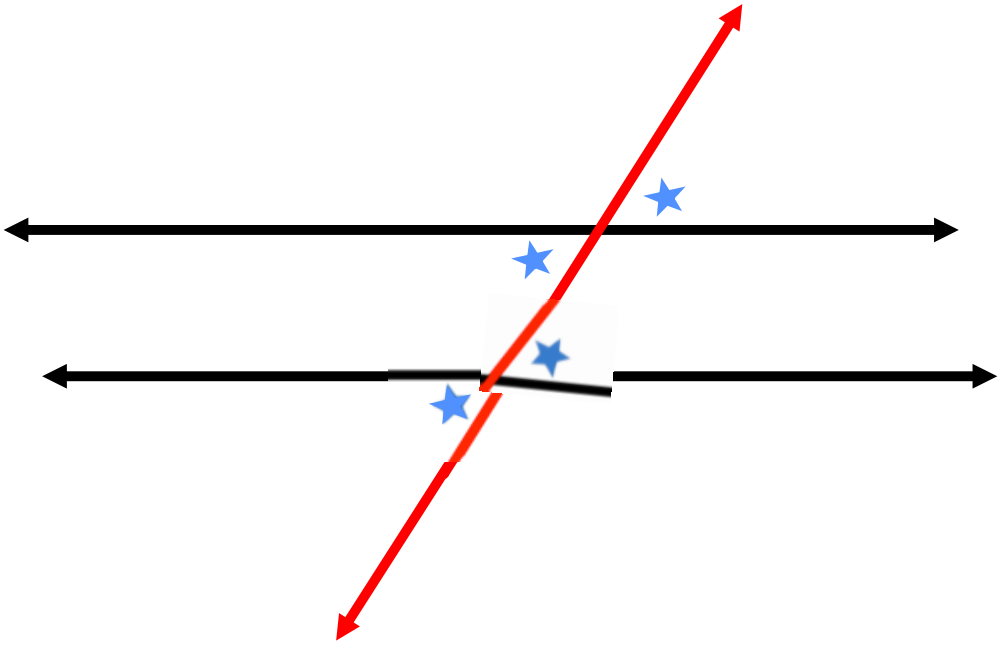
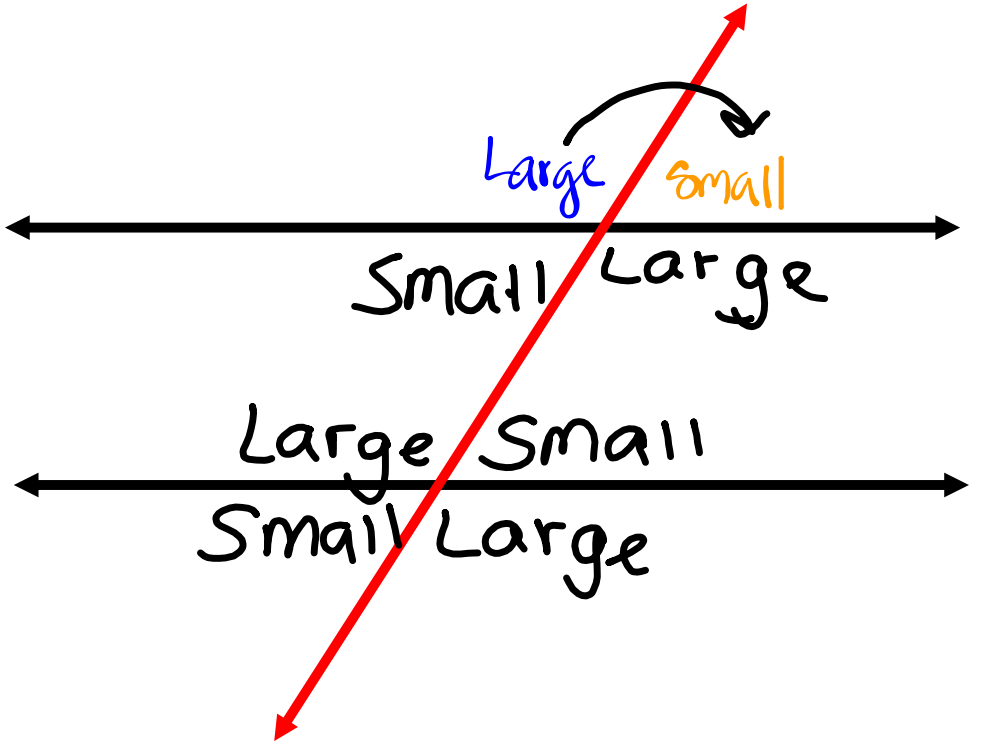
What other angles are equal to ★ ?



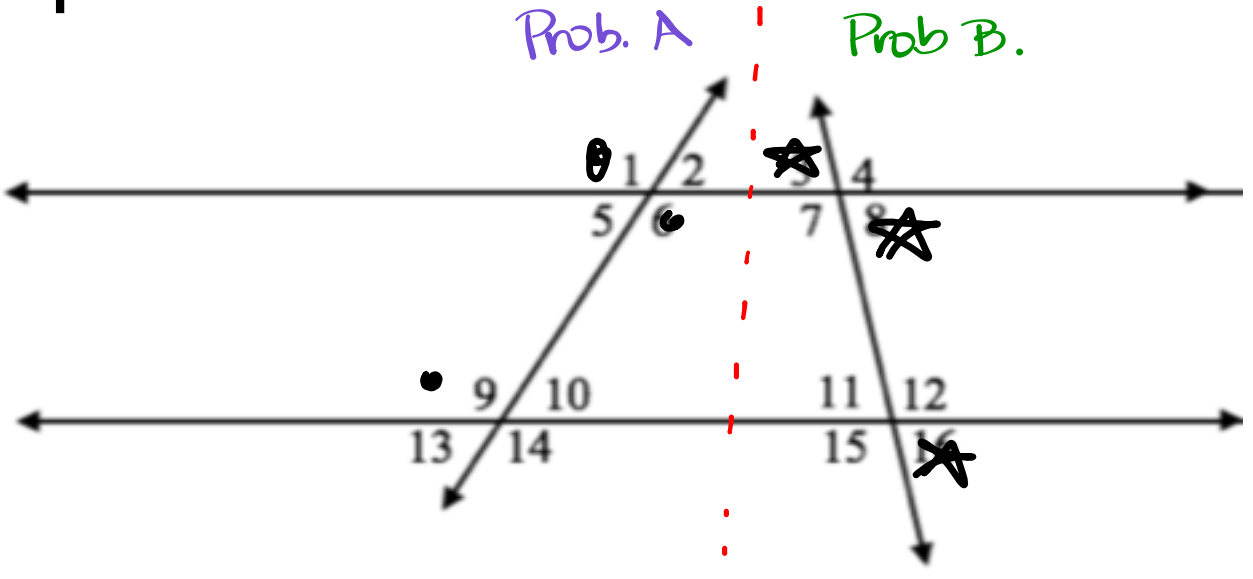
There are only **2** angle measures when parallel lines are cut by a transversal.




Large + Small 180°

# Don't be fooled by a problem like this!

**This is really 2 problems in one!**




Angles formed in Problem A have

NOTHING to do with angles in Problem B!

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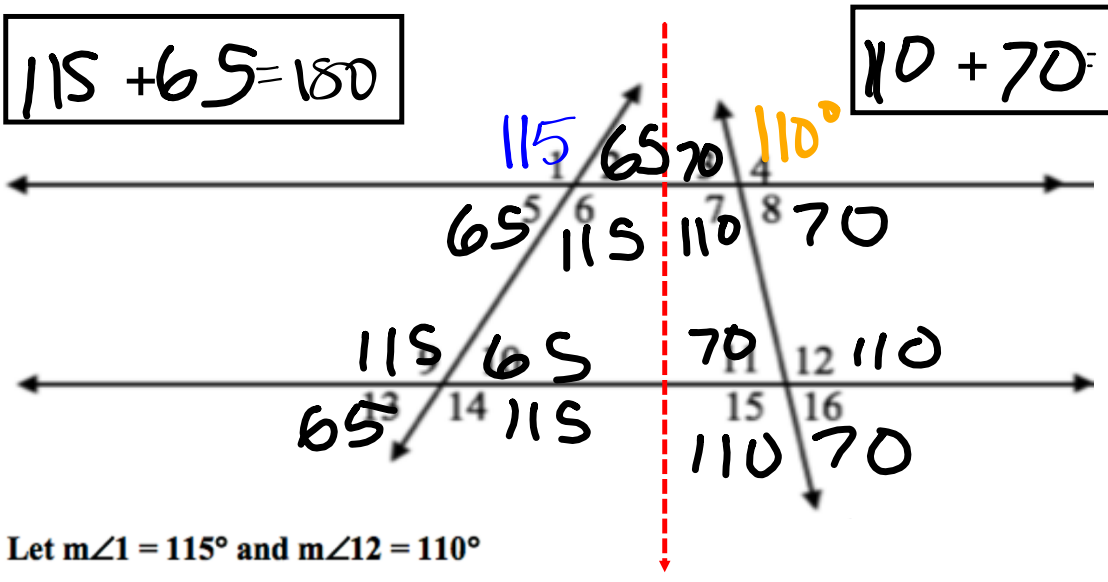
115 + 65 = 180

110 + 70 = 180




**Let m∠1 = 115° and m∠12 = 110°**

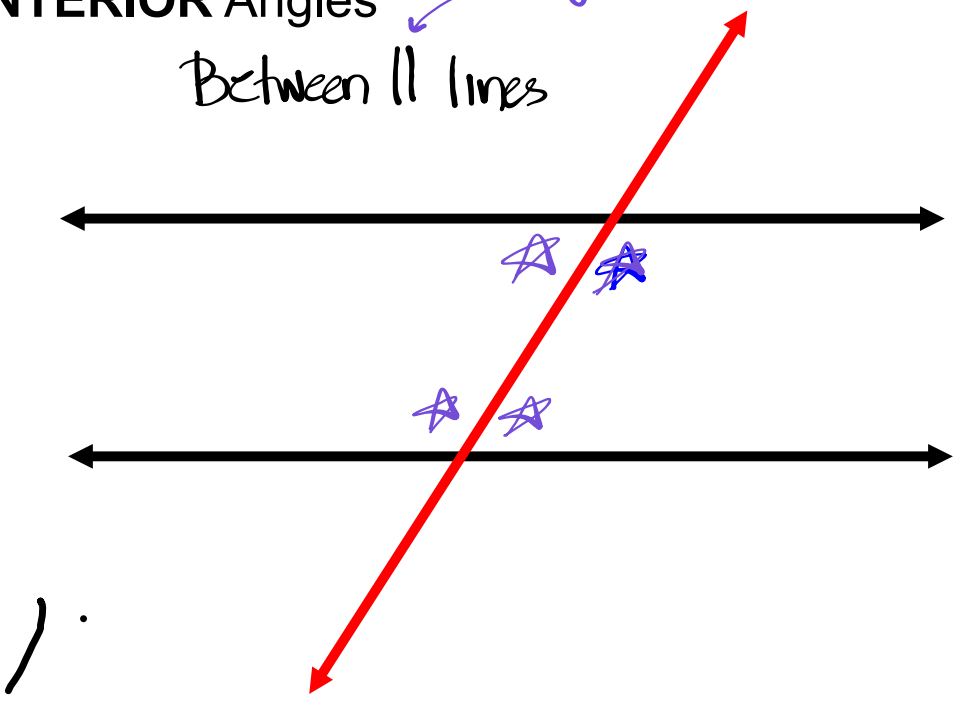
| | |
|---|---|
| 1. m∠9 = _____ | 5. m∠4 = _____ |
| 2. m∠10 = _____ | 6. m∠11 = _____ |
| 3. m∠8 = _____ | 7. m∠5 = _____ |
| 4. m∠3 = _____ | 8. m∠14 = _____ |

# Some additional vocab...

**INTERIOR** Angles

symbol for parallel

Between || lines



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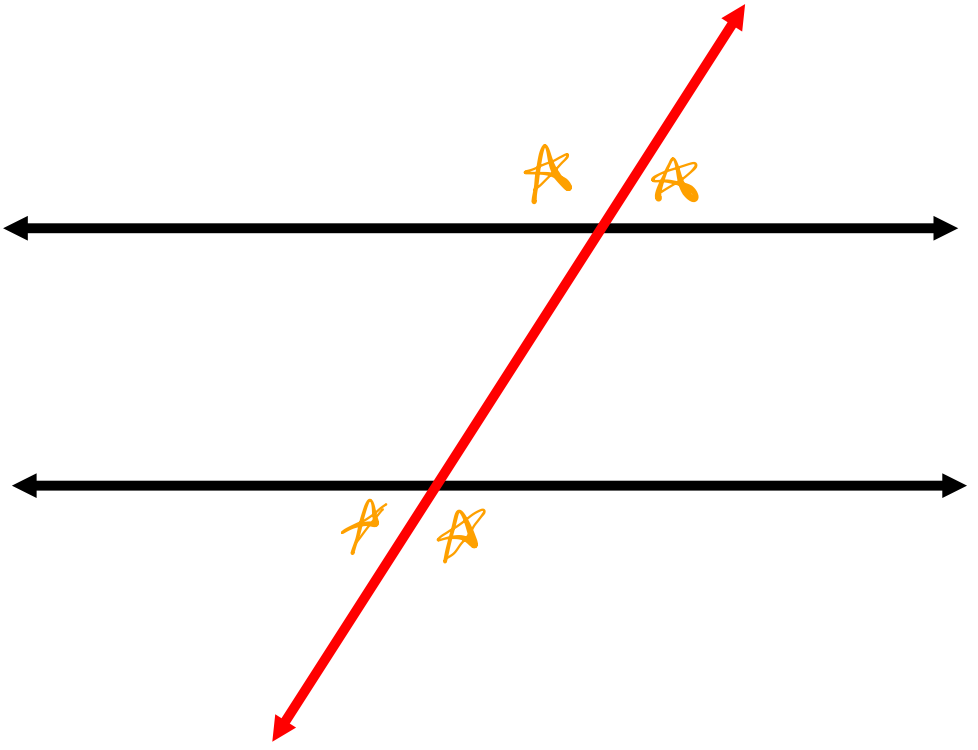
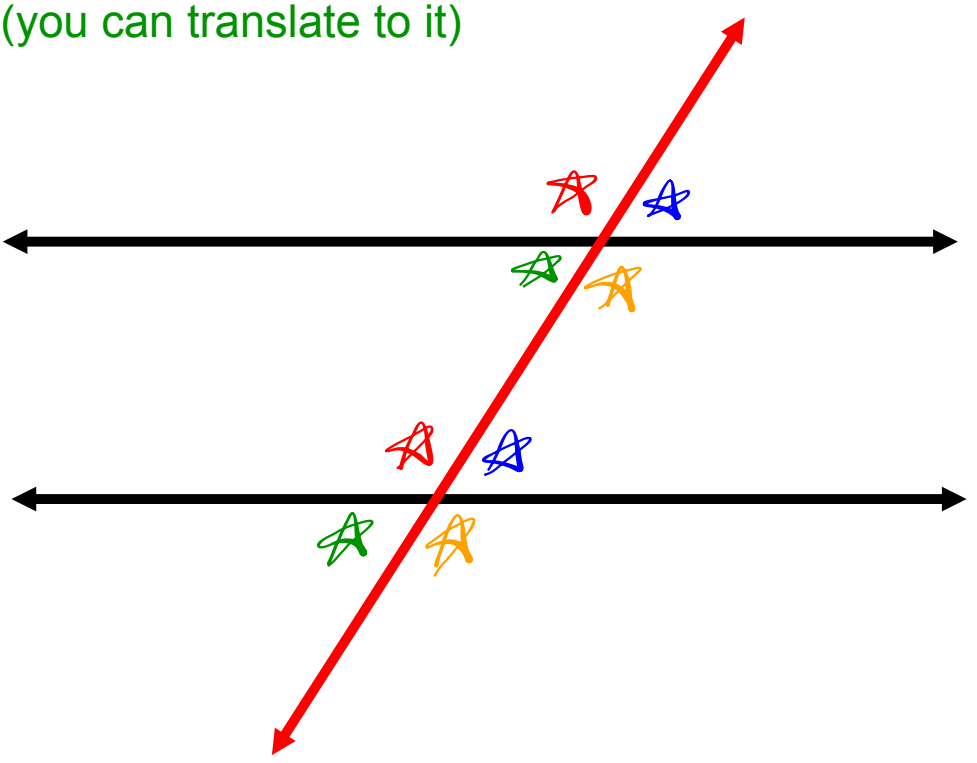
**EXTERIOR** Angles - on the outside of the parallel lines



## **CORRESPONDING** Angles

Same angle measures that occupy the same relative position.

(you can translate to it)



You can take a snapshot and translate an angle to its corresponding angle

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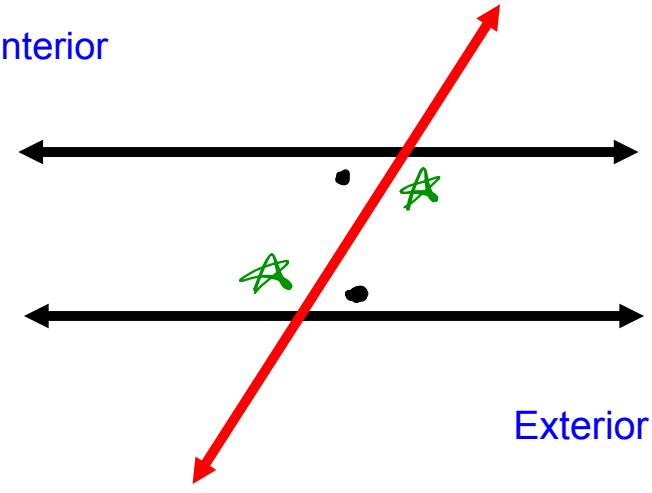
**ALTERNATING** Angles - alternate sides of the transversal

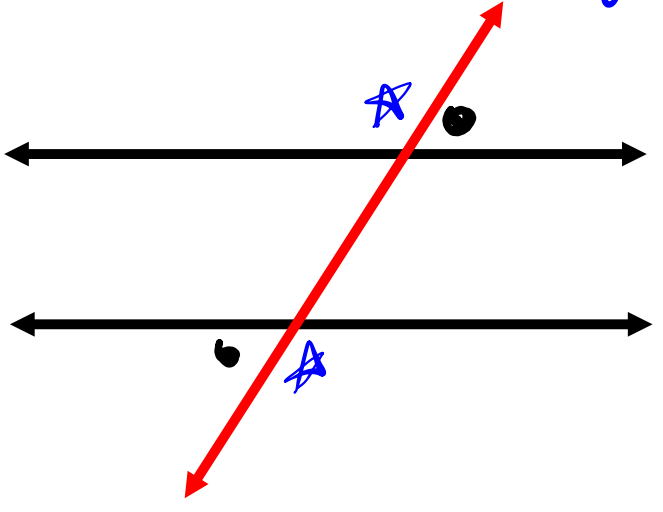
Interior



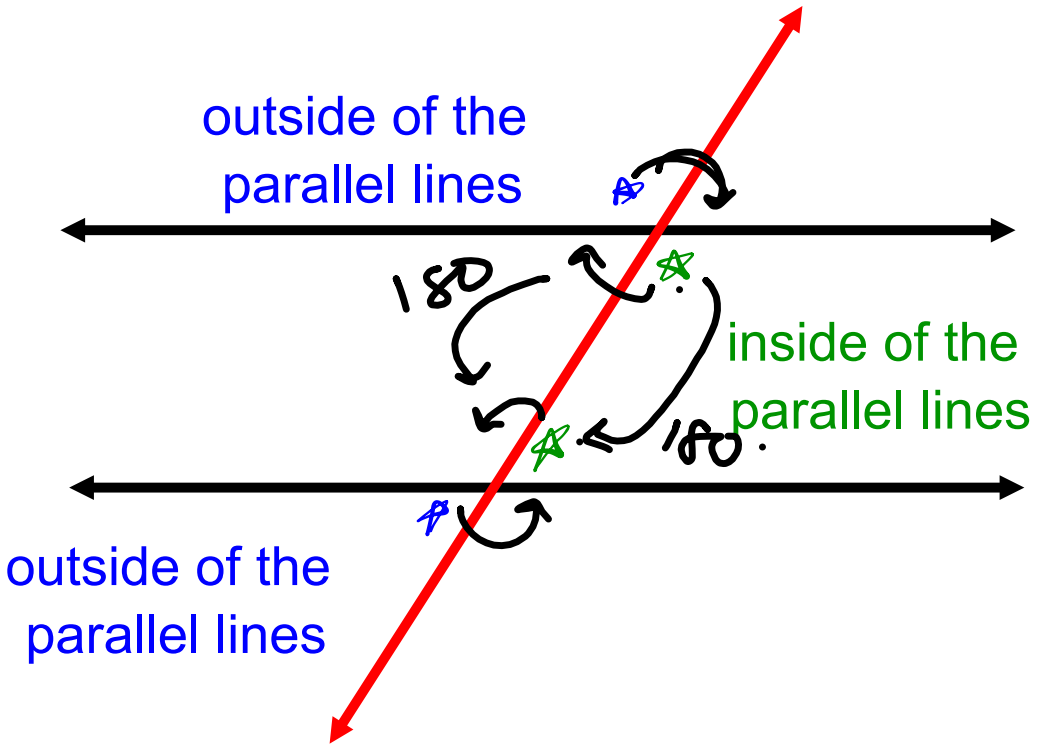
Angles are equal

Exterior

Angles are equal



**CONSECUTIVE** Angles In a row Sum = 180°



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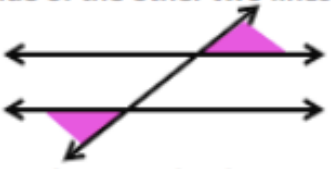
## alternate exterior angles

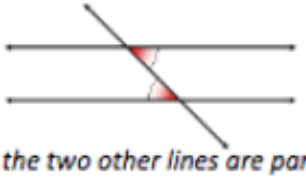
angles that are on opposite sides of the transversal and are on the outside of the other two lines



*When the two other liners are parallel, these angles are congruent.

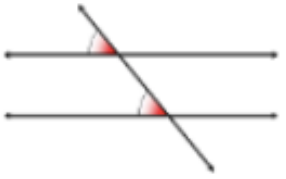
## alternate interior angles

angles that are on opposite sides of the transversal and are in between the other two lines



*When the two other lines are parallel, these angles are congruent.

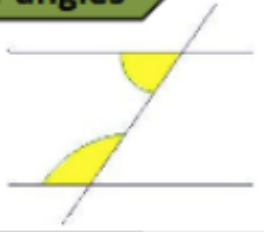
## corresponding angles



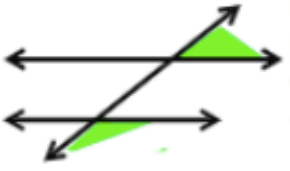
angles that have the same relative position in geometric figures

## same-side interior angles

angles that are on the same side of the transversal and are between the other two lines



## same-side exterior angles



angles that are on the same side of the transversal and are on the outside of the other two lines

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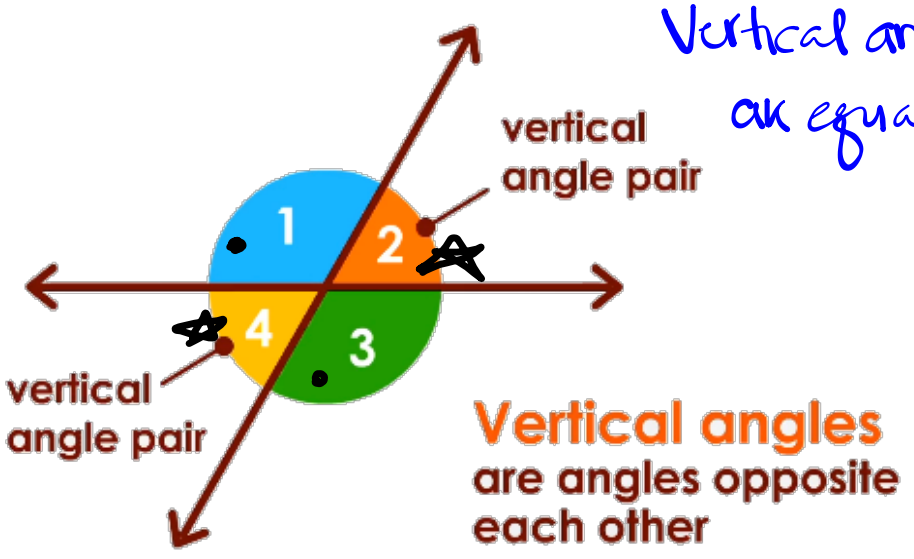
# **VERTICAL** Angles



You should now have all the info you need to complete the rest of the packet!

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GEOMETRY

# Working With Linear Pairs

= 180°

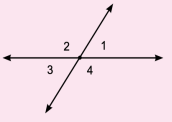
**Write the correct answer each question below.**

Each angle in Figure 1 is numbered.
What makes a linear pair with:

A) ∠1 _____ _____

B) ∠4 _____ _____

**Figure 1**




In Figure 2 what angles make a linear pair with:

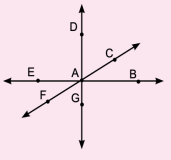
A) ∠BAC _____ _____

B) ∠DAE _____ _____

C) ∠GAF _____ _____

D) ∠BAD _____ _____

**Figure 2**





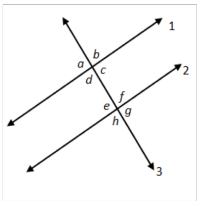



**Linear Pair: Sum of Angles =_____**

## Special Angle Pairs with Parallel Lines

**Line 1 is parallel to line 2. List all the angle pairs that fall into each category.**

| Corresponding | Alternate Interior |
|---|---|
| | |
| **Alternate Exterior** | **Consecutive Interior** |
| | |




**Line *a* is parallel to line *b*. Tell if each statement is true (T) or false (F).**

∠1 and ∠10 are alternate exterior angles. _____

∠8 and ∠11 are alternate interior angles. _____

∠2 and ∠10 are corresponding angles. _____

∠2 and ∠7 are alternate interior angles. _____

∠7 and ∠15 are corresponding angles. _____

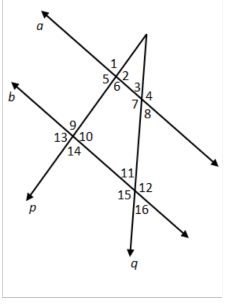
∠5 and ∠10 are alternate interior angles. _____

∠7 and ∠11 are consecutive interior angles. _____

∠10 and ∠14 are consecutive interior angles. _____

∠1 and ∠3 are corresponding angles. _____

∠4 and ∠15 are alternate exterior angles. _____




**Interior:** _____

**Exterior:** _____

**Consecutive:** _____

**Alternate:** _____

**Corresponding:** _____

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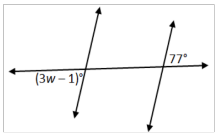
## Parallel Lines: Finding the Unknown

**Each diagram is formed by two parallel lines and a transversal. Write the equation you can use to find the value of the variable. Then find the value of the variable.**

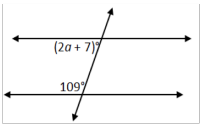
Equation _____

$w$ = _____



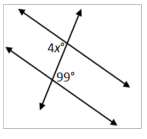

Equation _____

$a$ = _____



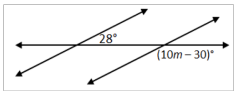

Equation _____

$x$ = _____



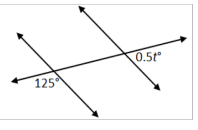

Equation _____

$m$ = _____




Equation _____

$t$ = _____

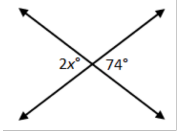




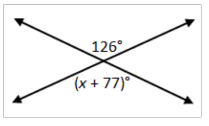

## Writing Equations for Vertical Angles

**Find the values of $x$ and $y$.**

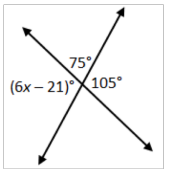
**1.** $x$ = _____



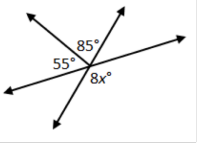

**2.** $x$ = _____




**3.** $x$ = _____

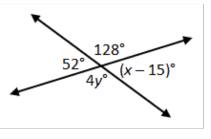



**4.** $x$ = _____



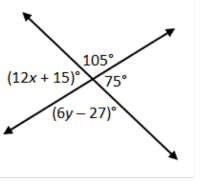

**5.** $x$ = _____

$y$ = _____




**6.** $x$ = _____

$y$ = _____



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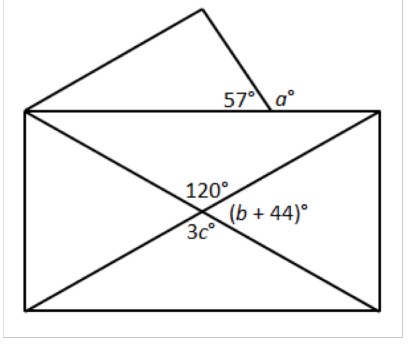
# Using Angle Relationships

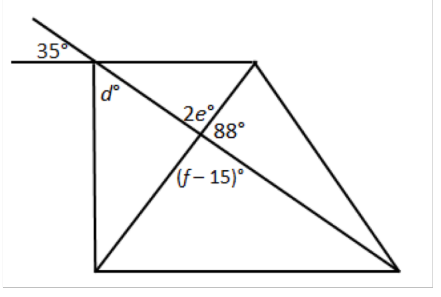
**Find the values of the variables.**

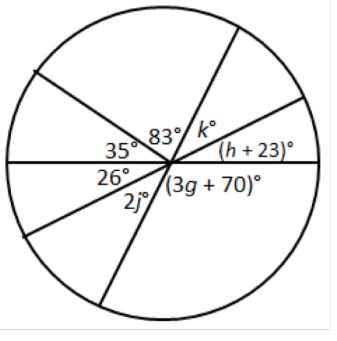
***a*** = _____ ***b*** = _____ ***c*** = _____

***d*** = _____ ***e*** = _____ ***f*** = _____

***g*** = _____ ***h*** = _____ ***j*** = _____ ***k*** = _____



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# Homework

Finish Packet