Angles

- Revising Basic Angles
- Naming Angles
- Calculating Missing angles
- Angles in a Triangle
- Corresponding Angles
- Alternate Angles

Type of Angles

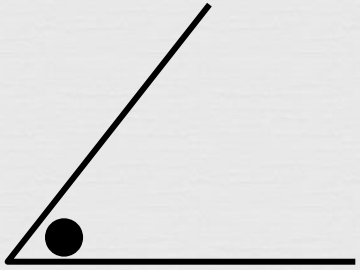
Learning Intention

1. To revise Type of Angles from level D.

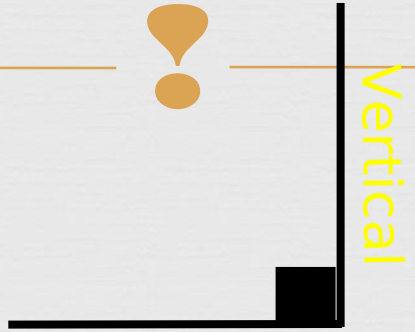
Success Criteria

1. To be able to identify acute, right-angle, obtuse, straight line and reflex angles.

Type of Angles

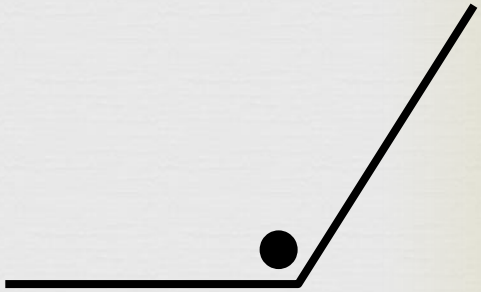


Acute
less than 90°



Horizontal

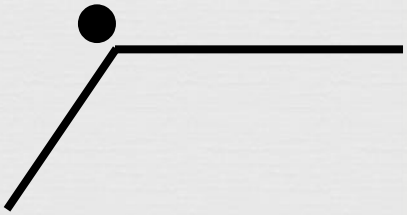
Right Angle
exactly 90°



Obtuse
Between 90° – 180°



Straight Line Angle
exactly 180°



reflex
over 180° less than 360°

Naming Angles

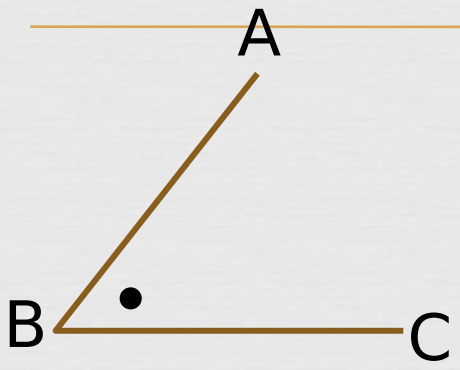
Learning Intention

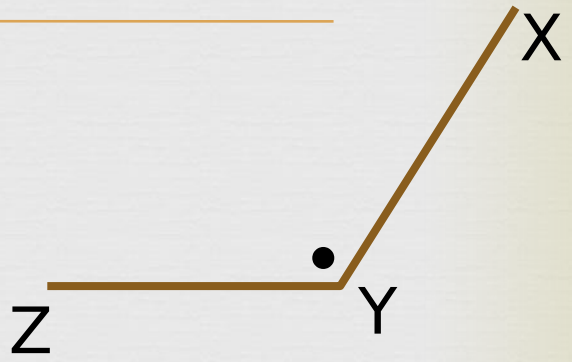
1. To explain how we name angles by THREE capital letters with the angle sign. The middle letter being where the angle is.

Success Criteria

1. To be able to name an angle.
2. Understand the difference between the type of angle and the name of an angle.

Naming Angles





Type of angle is acute

Name of angle is ∠ ABC

Type of angle is obtuse

Name of angle is ∠ ZYX

MIDDLE LETTER IS ALWAYS WHERE THE ANGLE IS

ALWAYS 3 CAPITAL LETTERS

Find Missing Angles

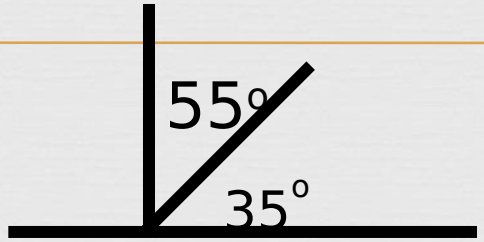
Learning Intention

1. To calculate missing angle give all other angles.

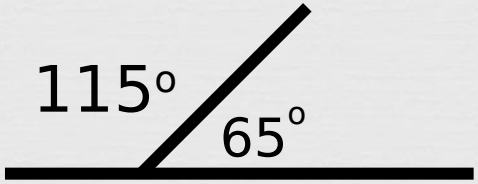
Success Criteria

1. To know 360^{o} in a circle.
2. Find missing angle given all other angles.

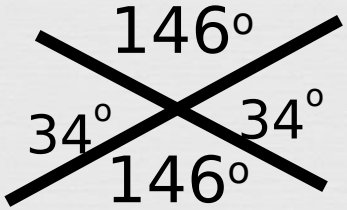
Find Missing Angle



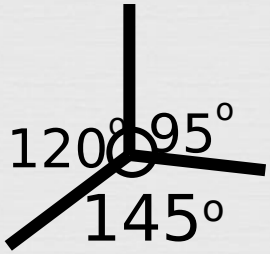
Two angles making a right angle add up to 90°
(Complementary angles)



Two angles making a straight line add up to 180°
(Supplementary angles)



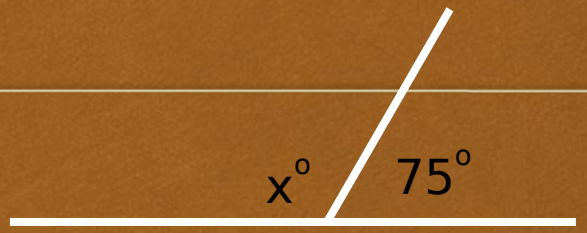
Angles opposite each other at a cross are equal.



Angles round a point always add up to 360°

Starter Questions

1. **Solve the equation 5x- 3=18 (decimal value)**
2. **Calculate (- 13)+(- 1)- 15**
3. **Calculate x:**



4. **Change 790cm into m**
5. **What is the coordinate C(- 8,- 4) reflected in the x- axis?**

Sum of Angles in a Triangle

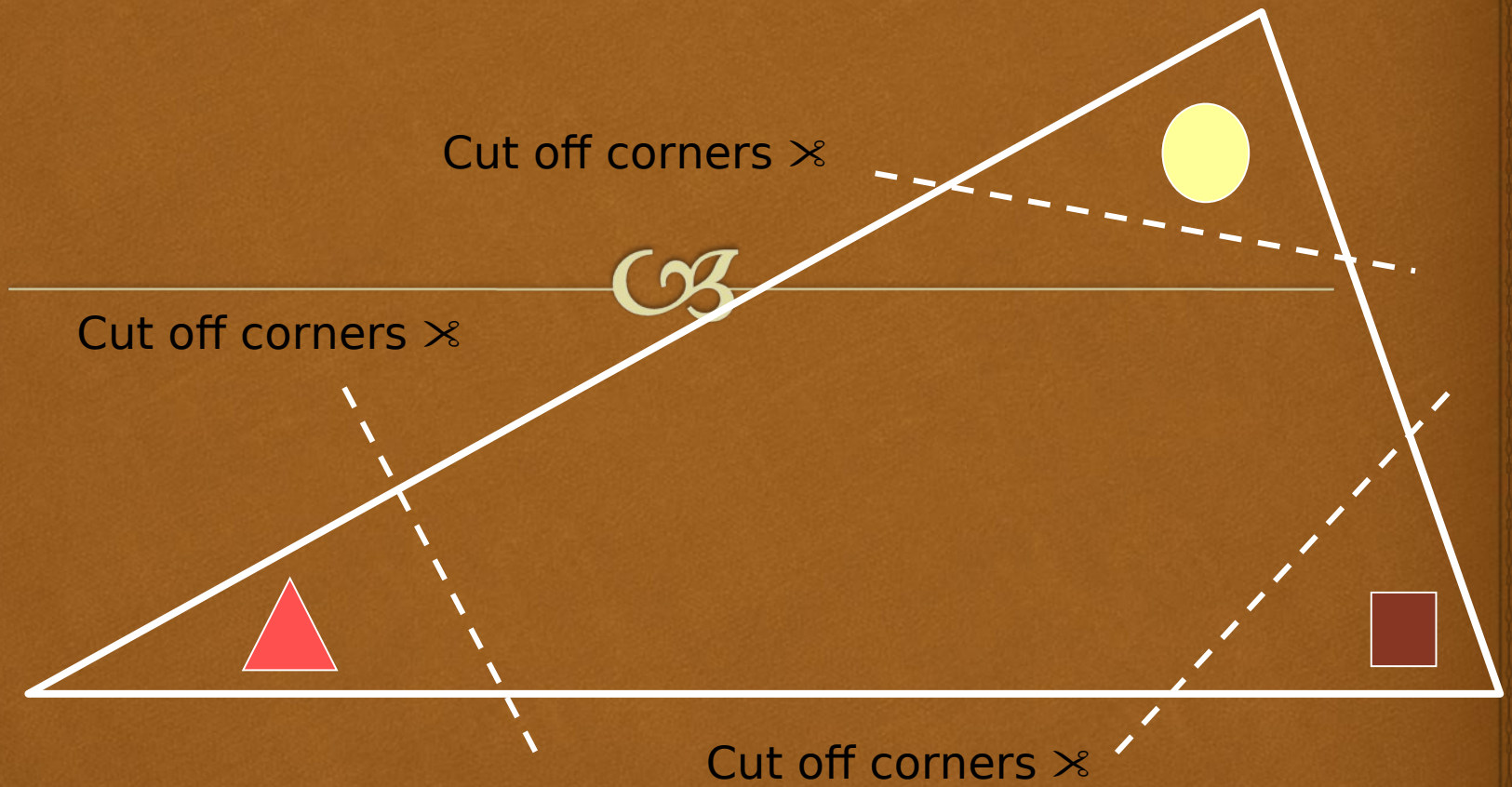
Learning Intention

1. To show that all the angles in a triangle sum to 180°.

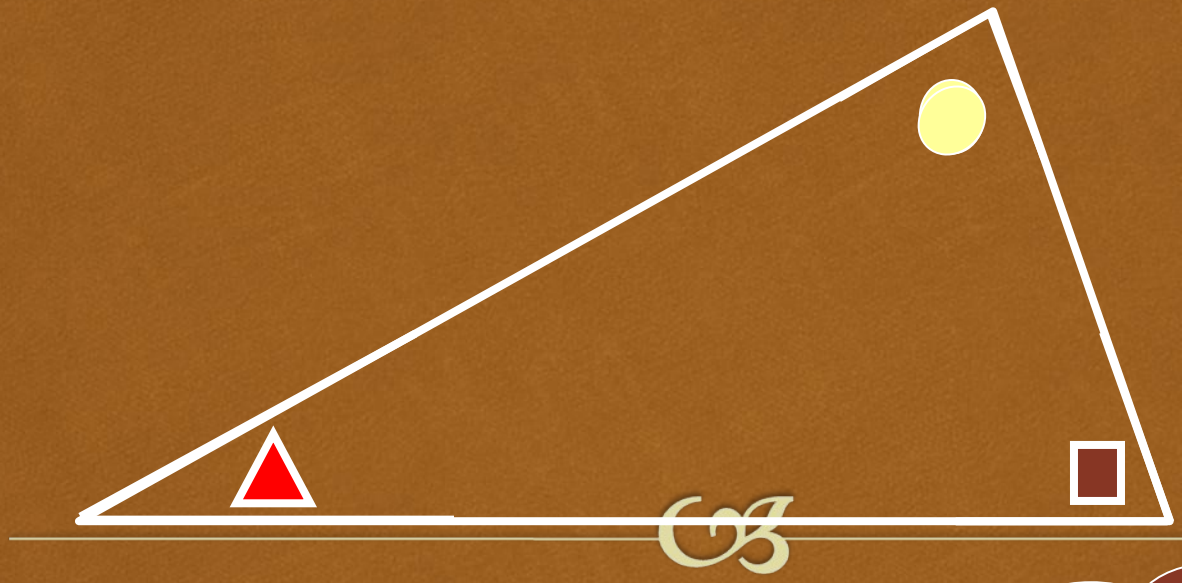
Success Criteria

1. To know all angles in a triangle add to 180°.
2. Use knowledge to solve problems.

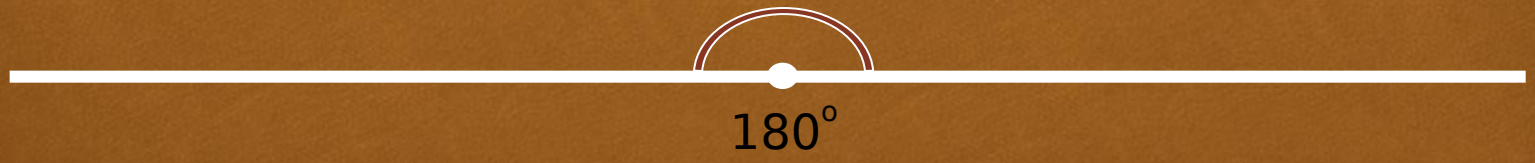
To determine the angle sum of any Triangle



Sum of angles in ANY Triangle

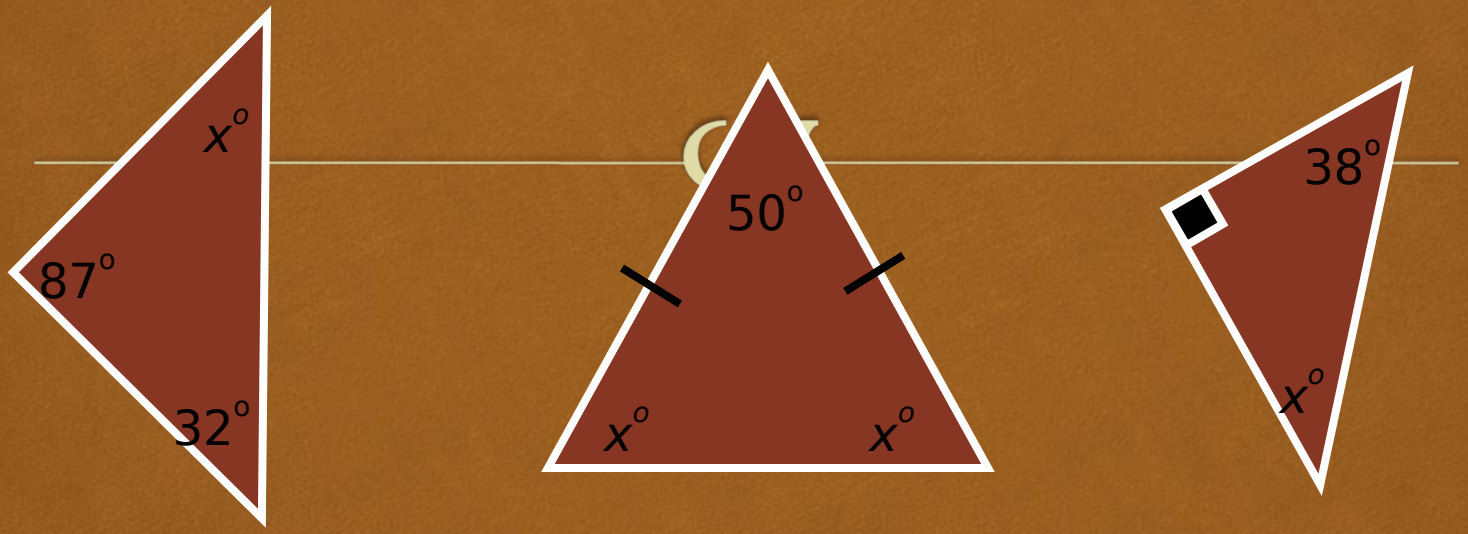


All angles in a triangle
ALWAYS
added up to 180^{o}



Sum of Angles in a Triangle

Copy out the following triangles and find the missing angles.



Remember all the angles add up to 180°

Angles

Corresponding Angles

Learning Intention

1. To explain the term corresponding angles and show how we use the property to solve problems.

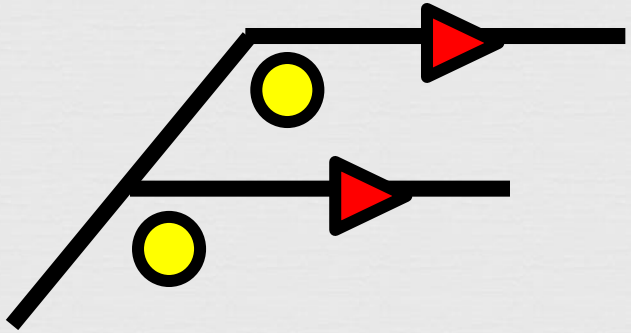
Success Criteria

1. To understand the term corresponding angles.
2. To be able to use property to solve problems.

Angles

Alternate Angles

Look for



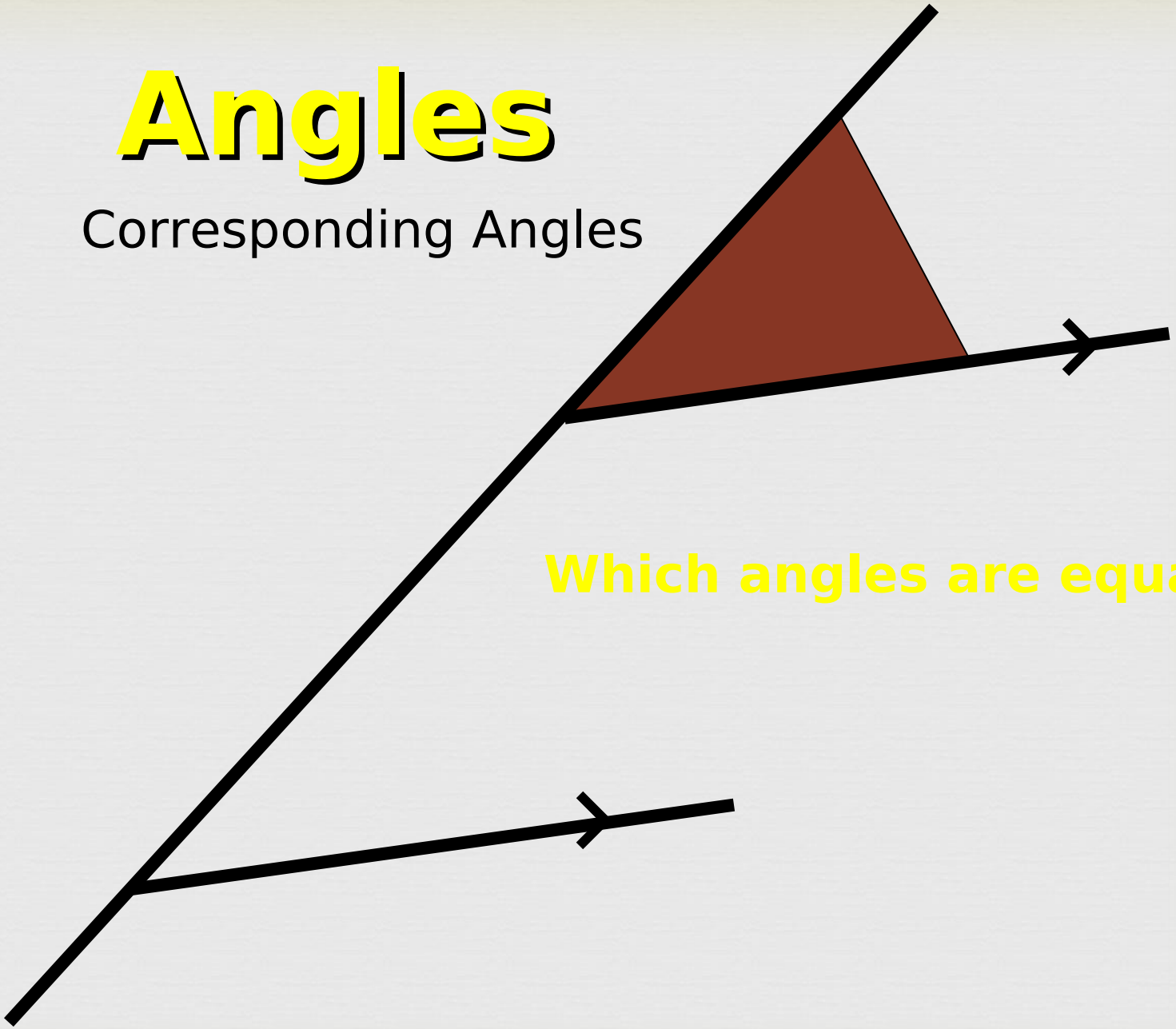
F

shapes

= equal angles

Angles

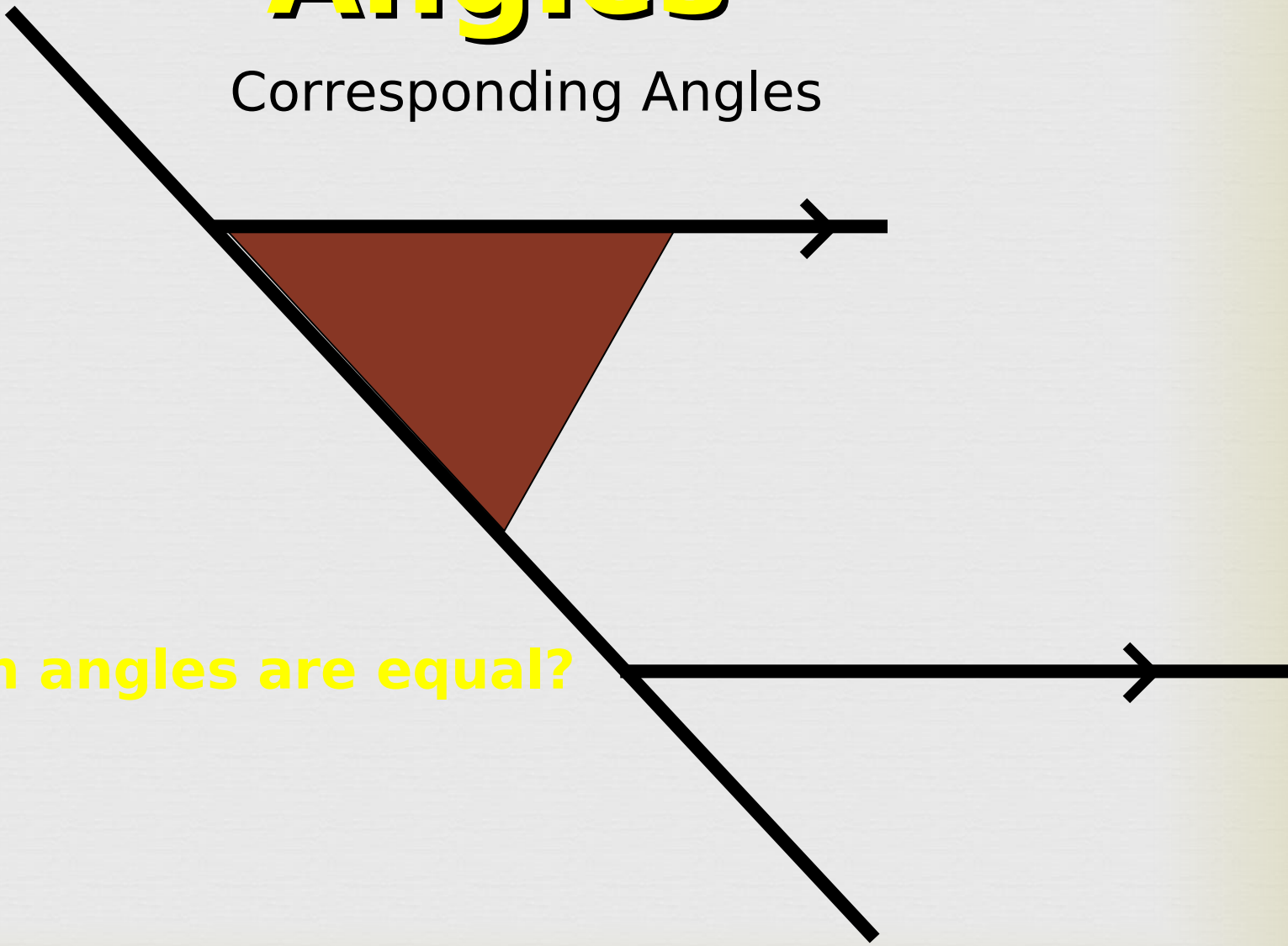
Corresponding Angles



Which angles are equal?

Angles

Corresponding Angles

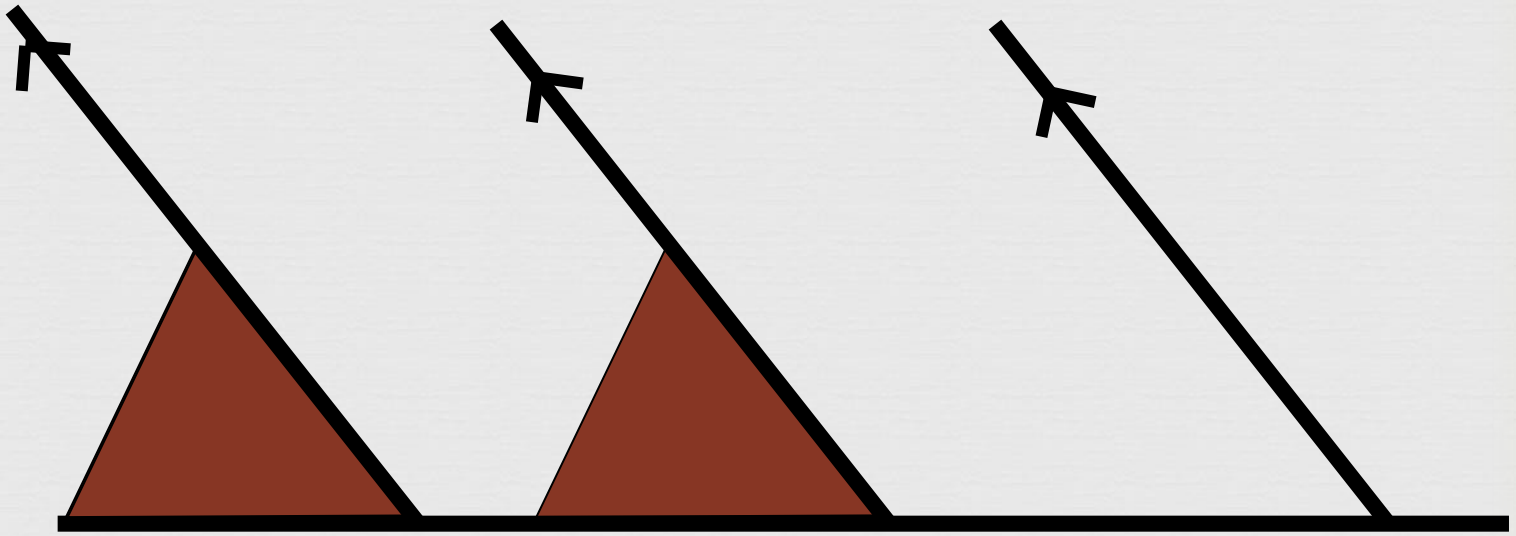


Which angles are equal?

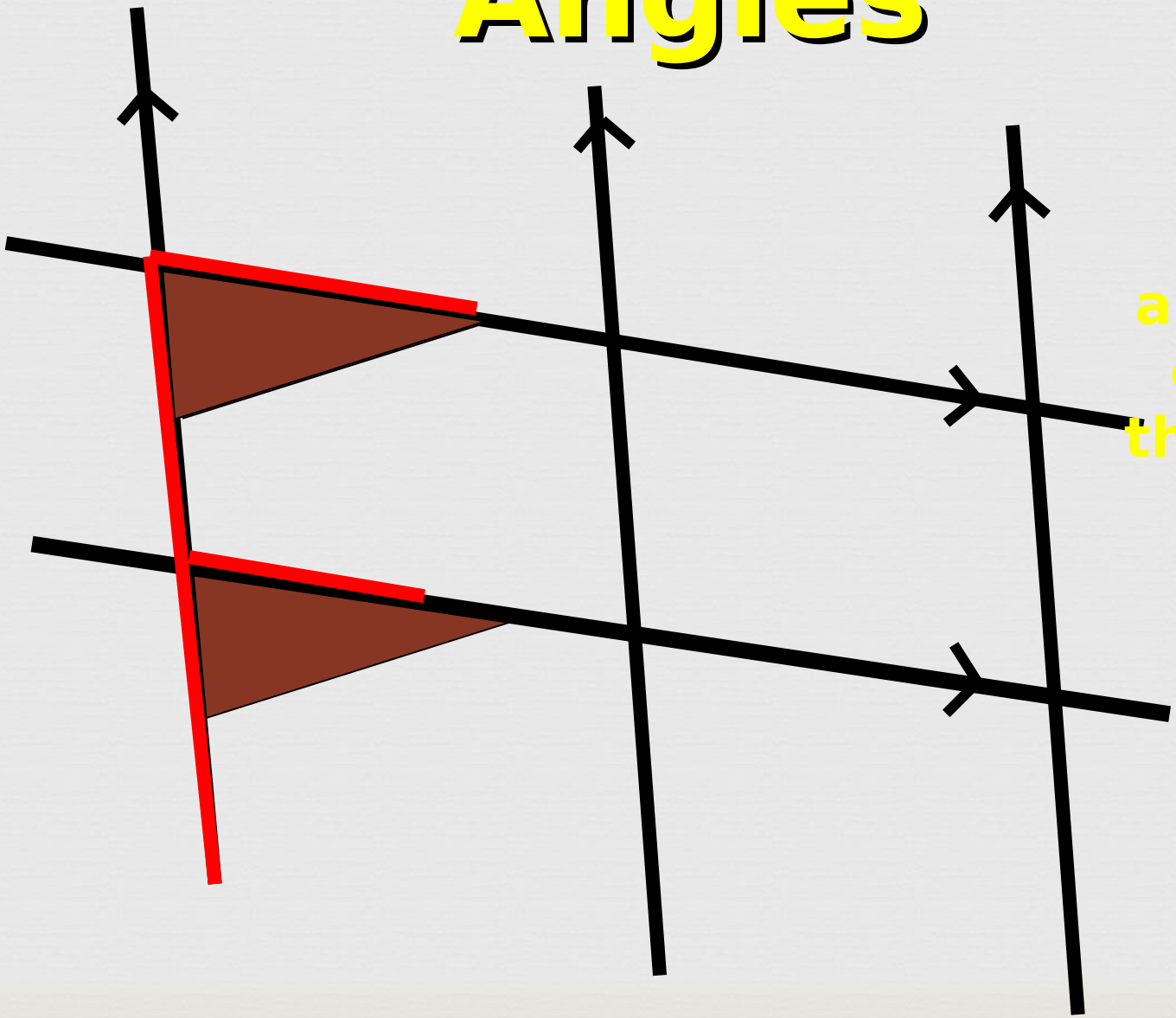
Angles

Corresponding Angles

Which angles are equal to the shaded angle?



Angles

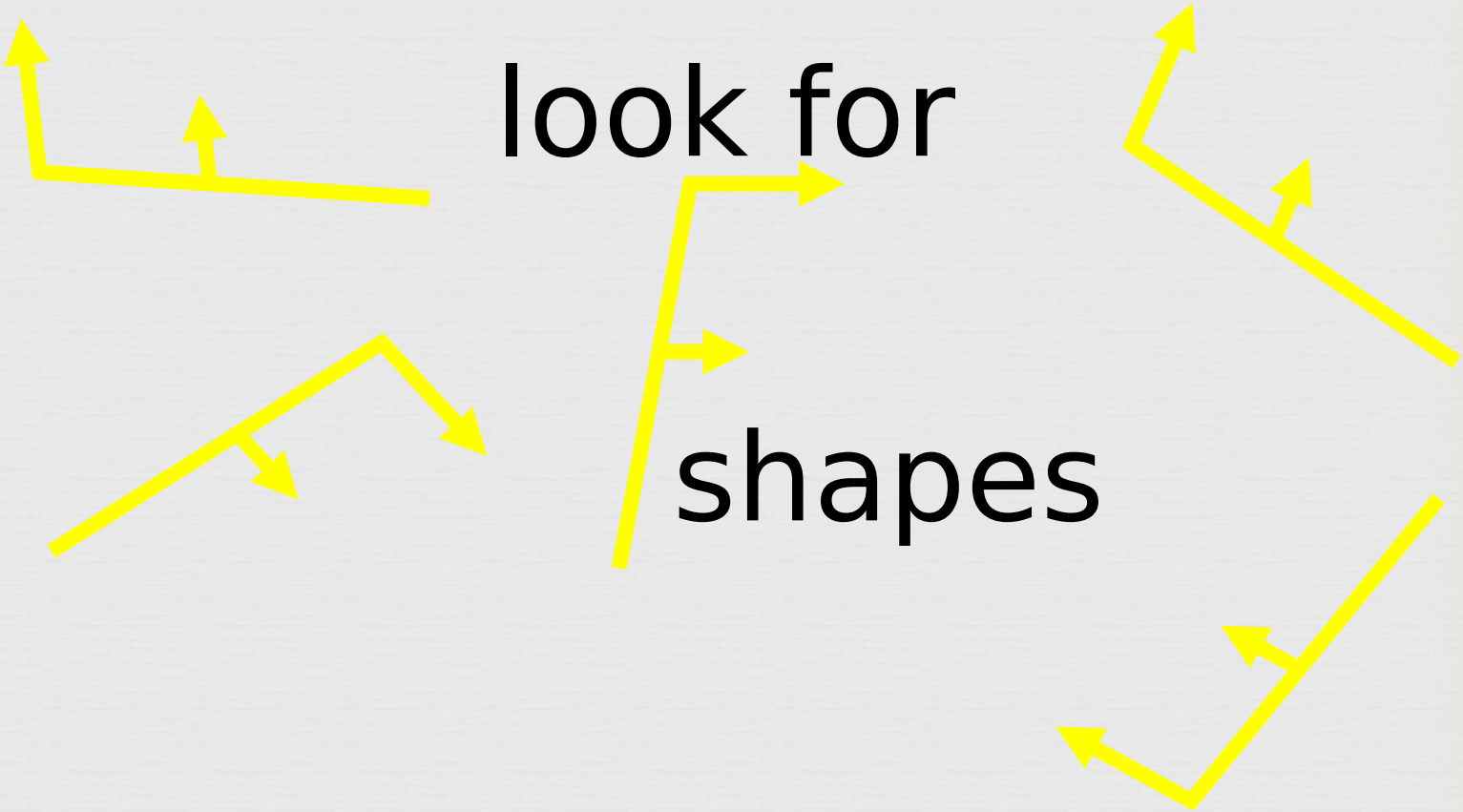


Which angles are equal to the shaded angle?

Angles

Corresponding Angles

look for

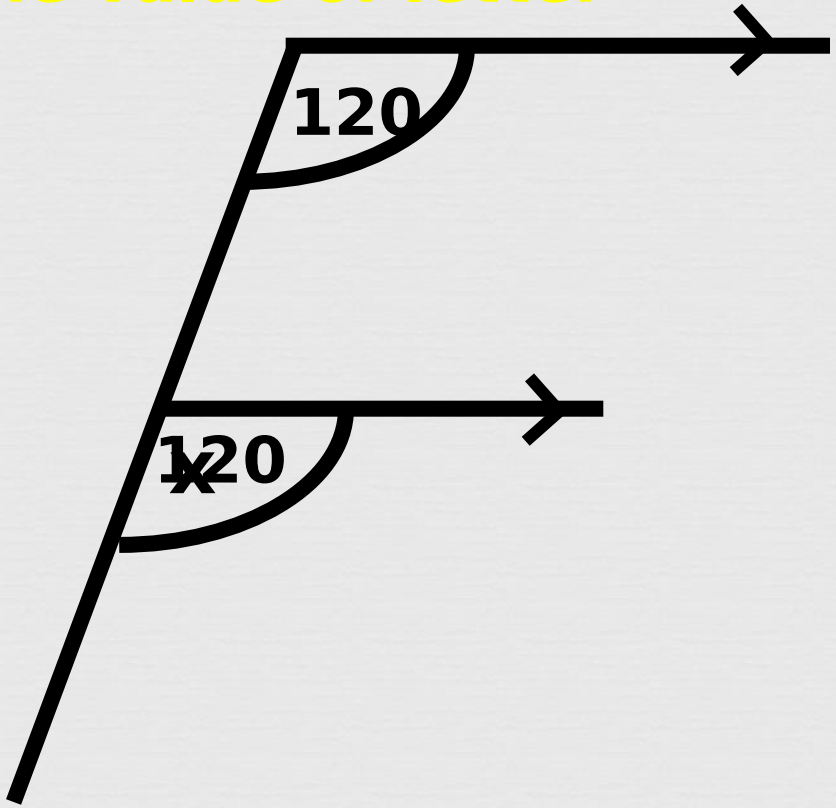


shapes

Angles

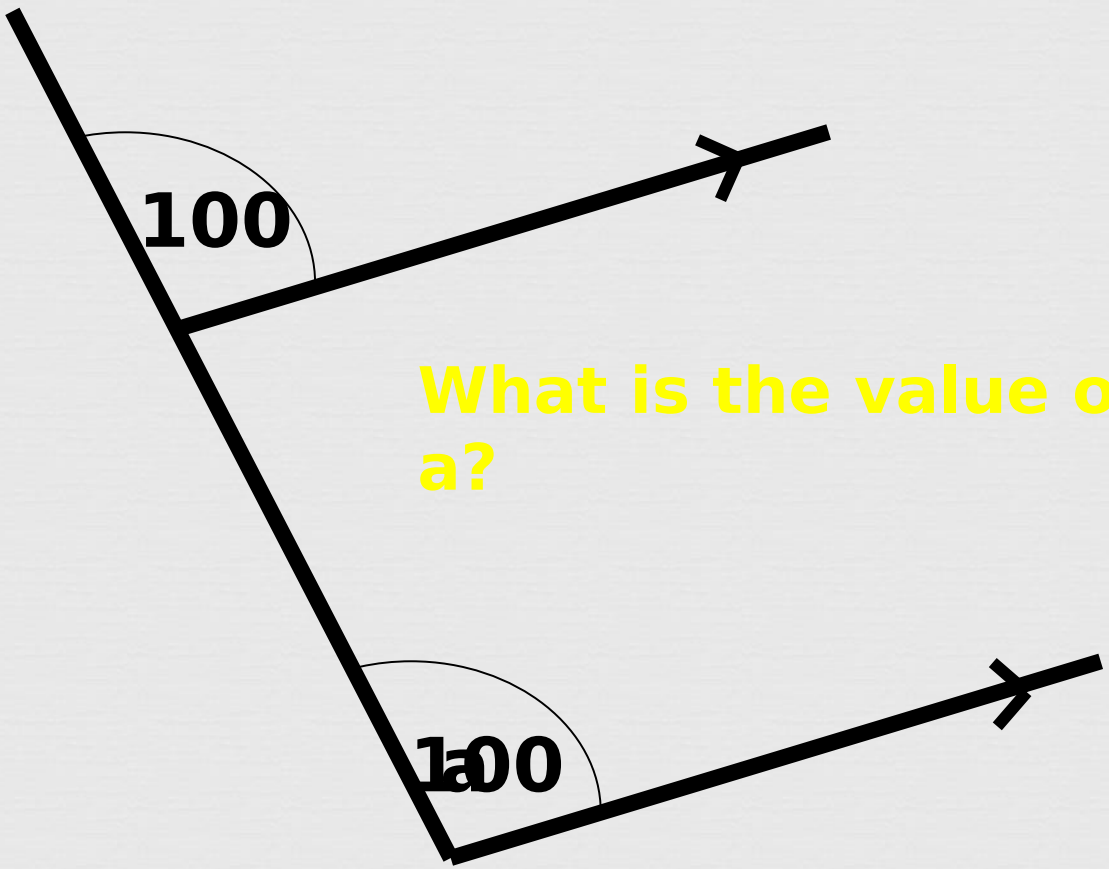
Corresponding Angles

What is the value of letter x?



Angles

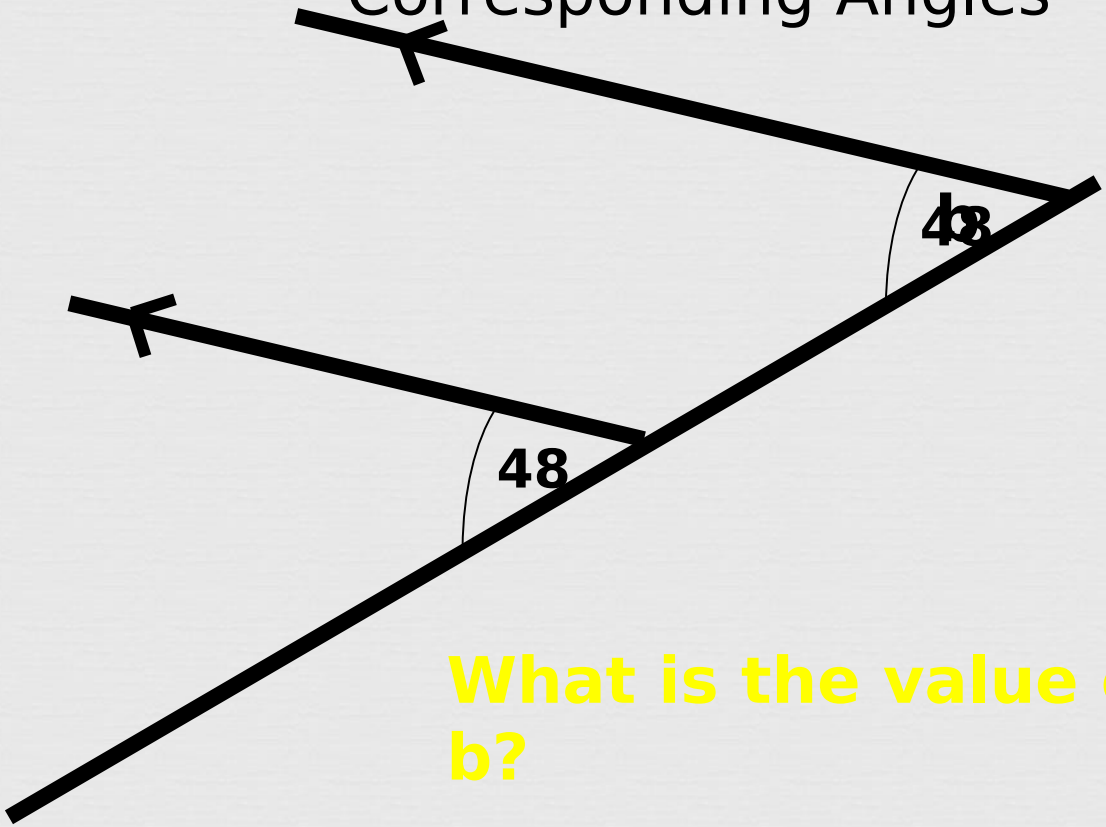
Corresponding Angles



What is the value of letter a?

Angles

Corresponding Angles

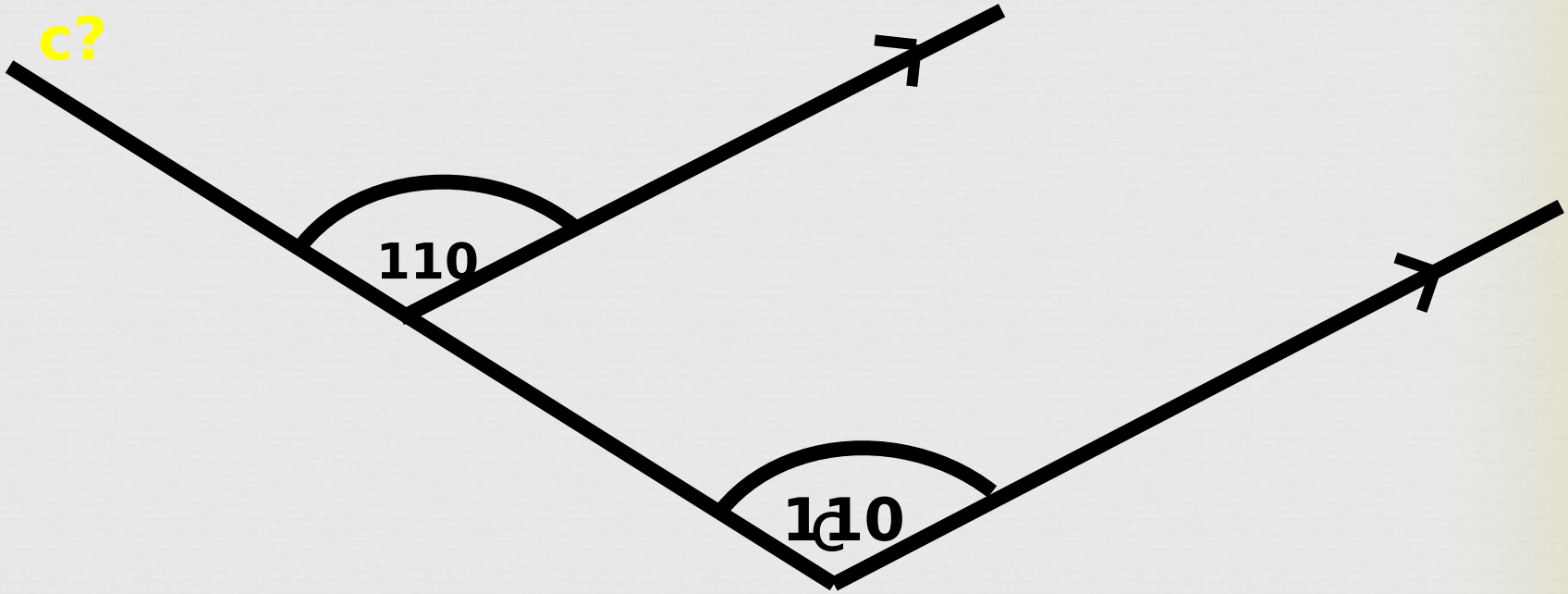


What is the value of letter b?

Angles

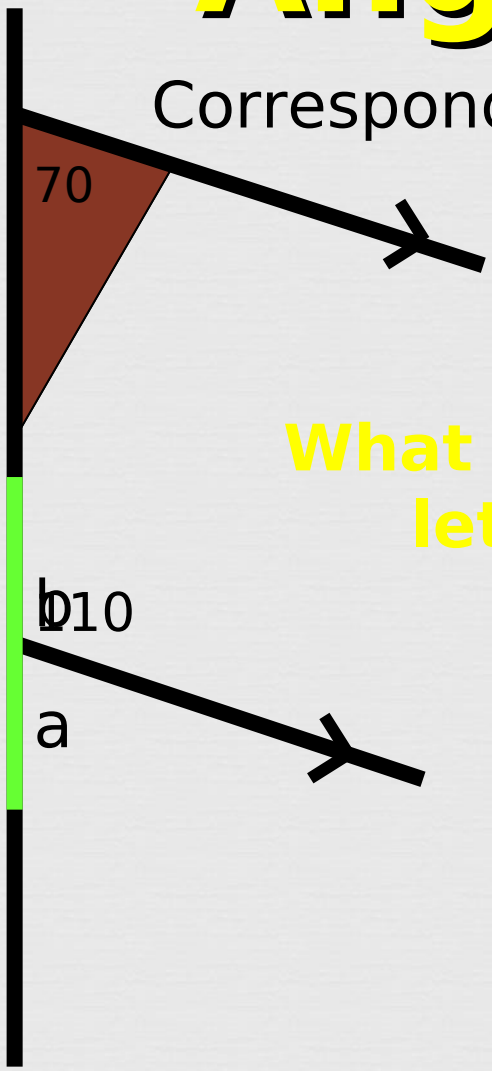
Corresponding Angles

What is the value of letter c?



Angles

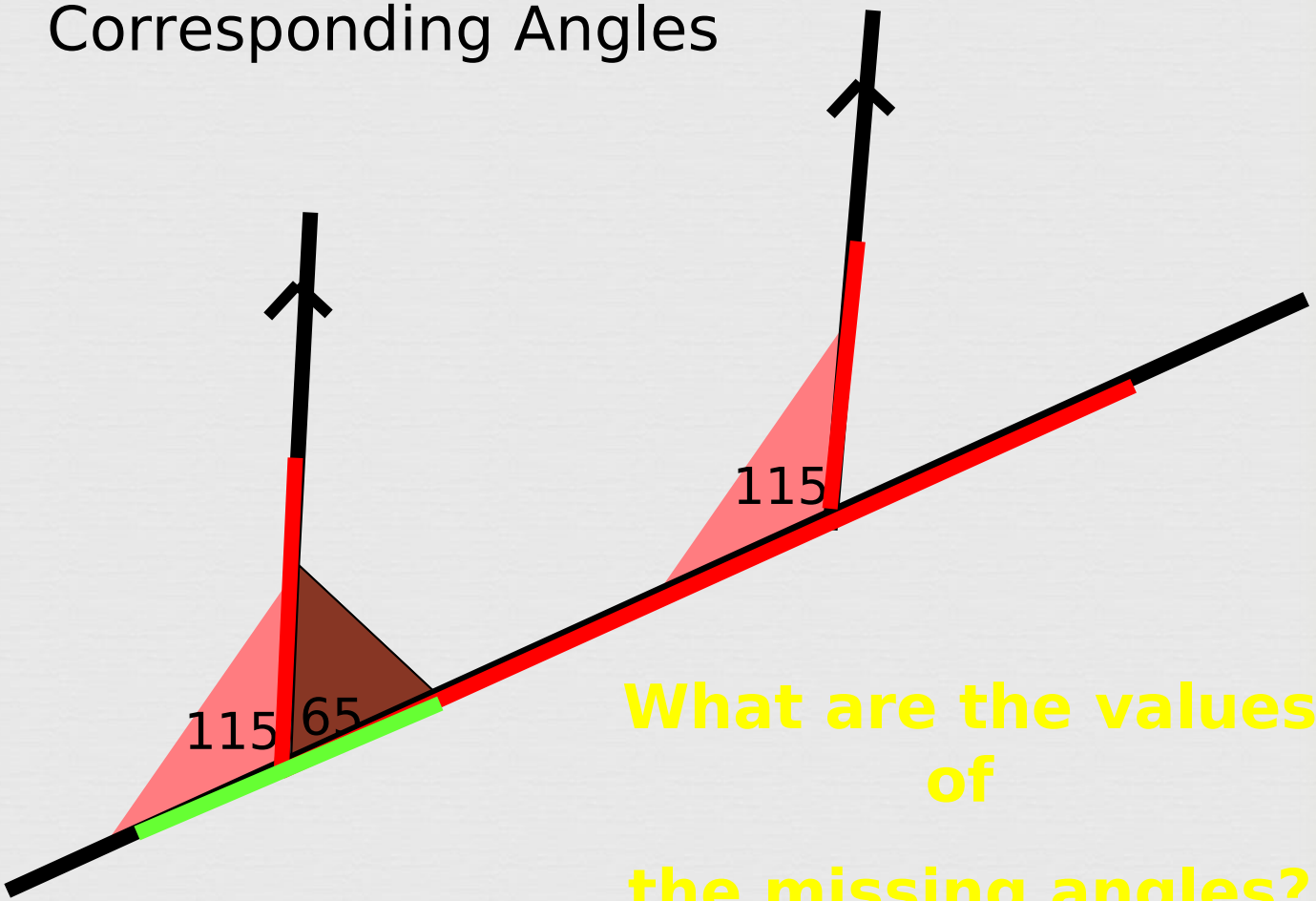
Corresponding Angles



What are the values of letters a and b?

Angles

Corresponding Angles



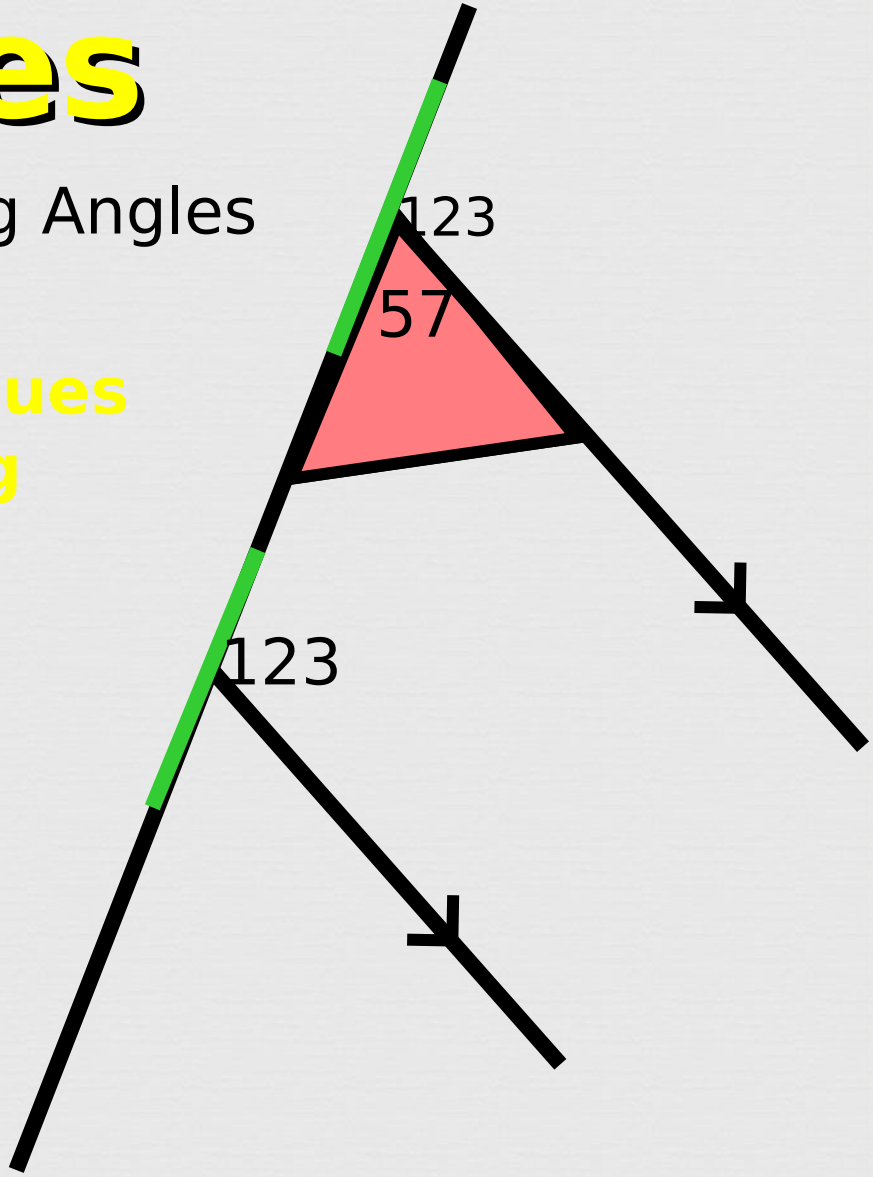
What are the values of

the missing angles?

Angles

Corresponding Angles

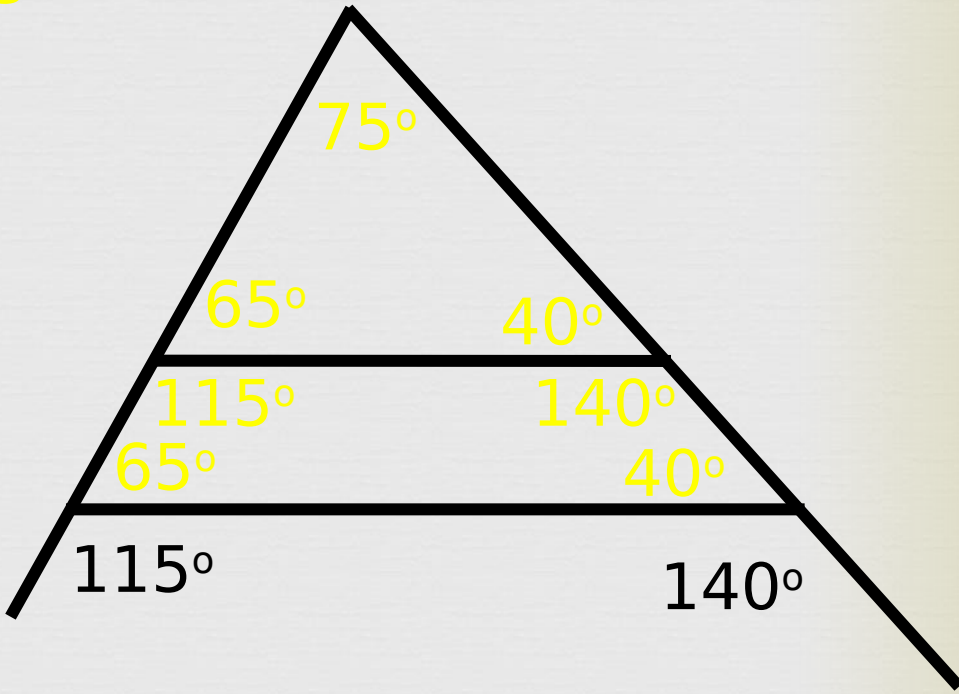
What are the values of the missing angles?



Angles

Corresponding Angles

What are the values of the missing angles?



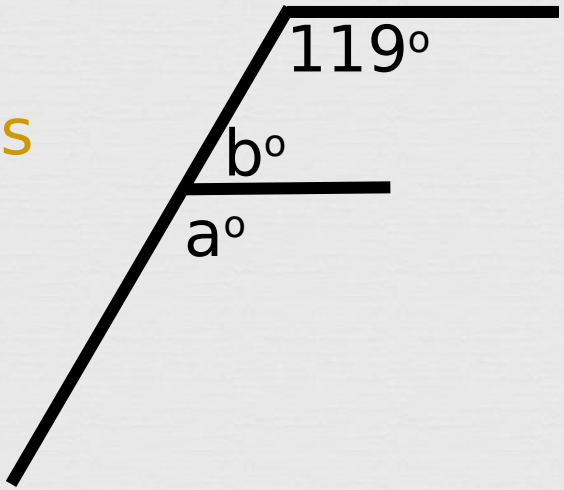
Starter Questions

Q1. Solve the equation below

$$4x - 7 = 9$$

Q2. Find two numbers that multiply to give 48 and divide to give 3.

Q3. Find missing angles



Angles

Alternate Angles

Learning Intention

1. To explain the term alternate angles and show how we use the property to solve problems.

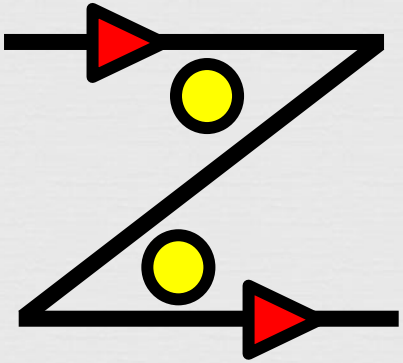
Success Criteria

1. To understand the term alternate angles.
2. To be able to use property to solve problems.

Angles

Alternate Angles

Look for



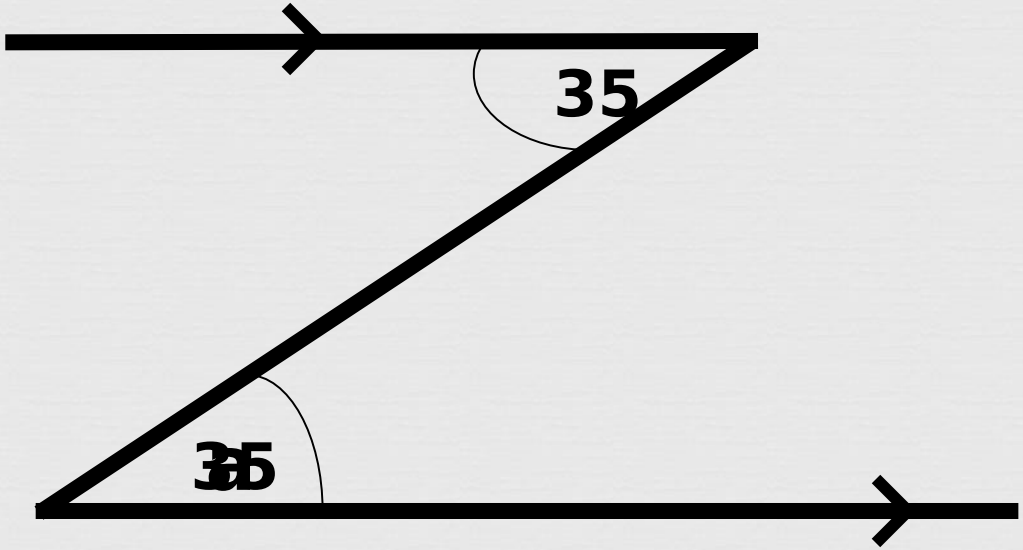
– Z shapes

= equal angles

Angles

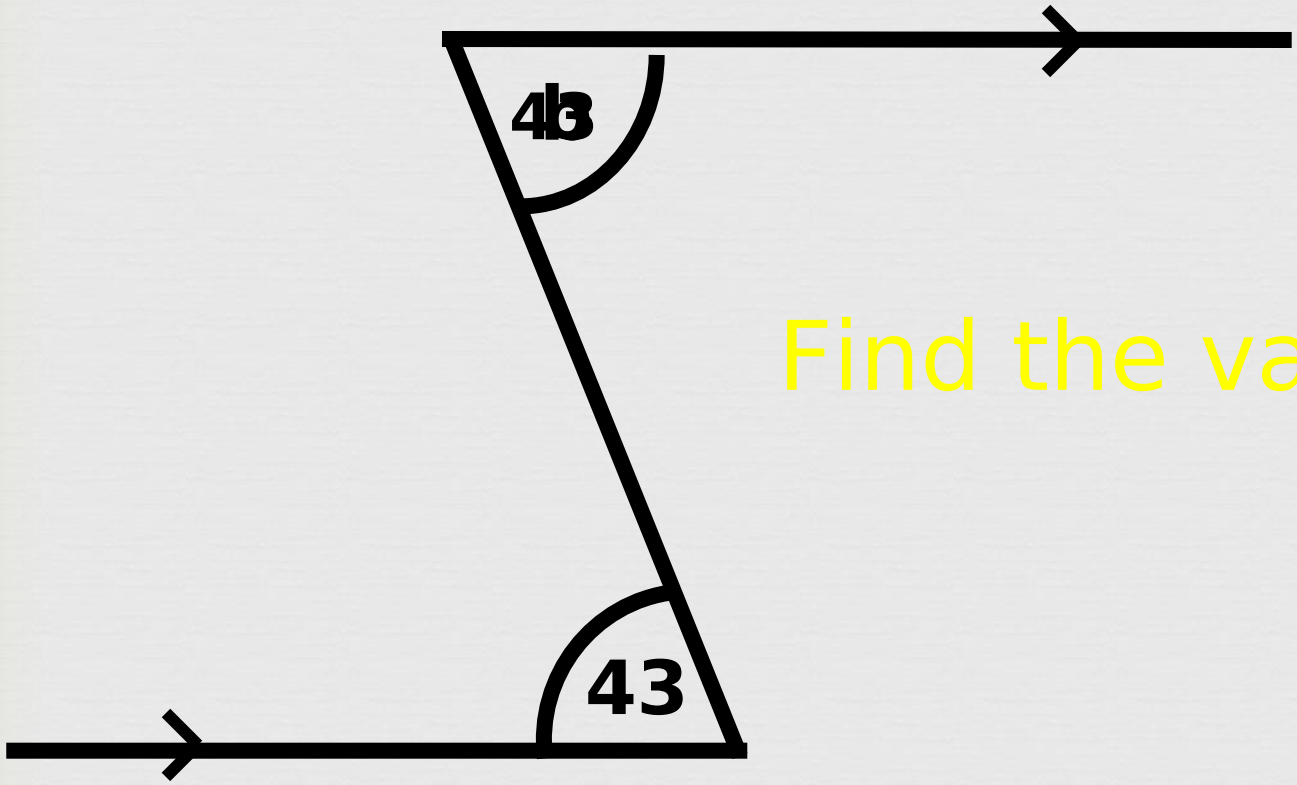
Alternate Angles

Find the value of a ?



Angles

Alternate Angles

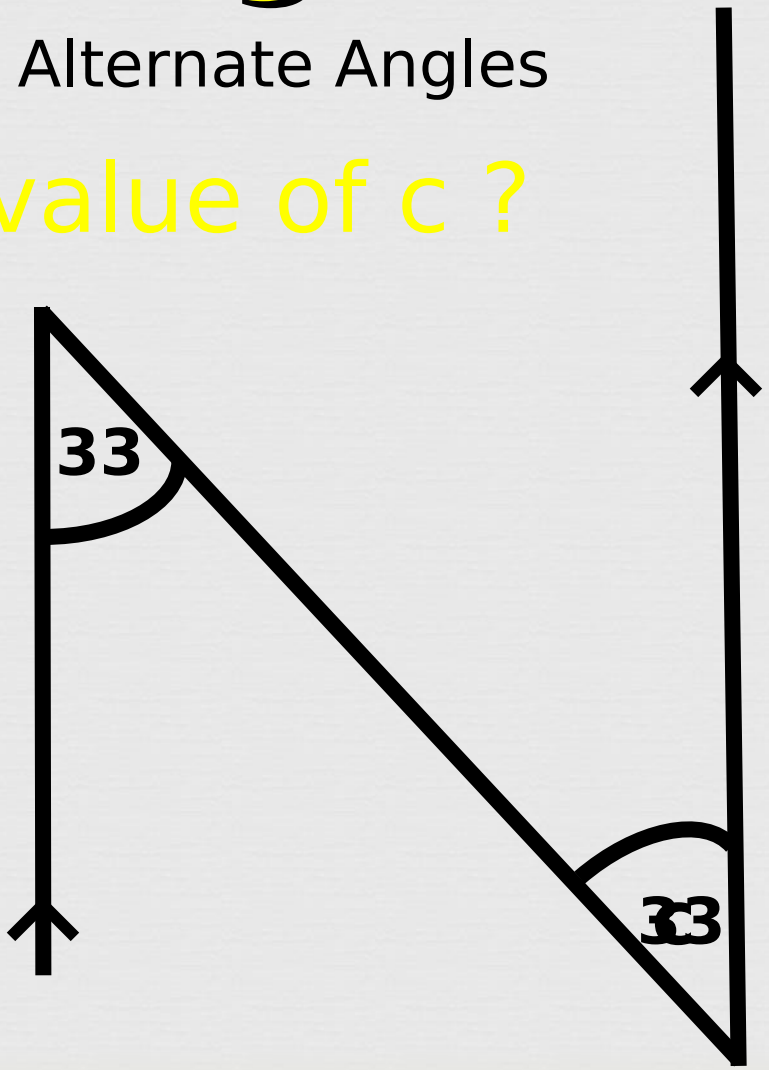


Find the value of b ?

Angles

Alternate Angles

Find the value of c ?



Angles

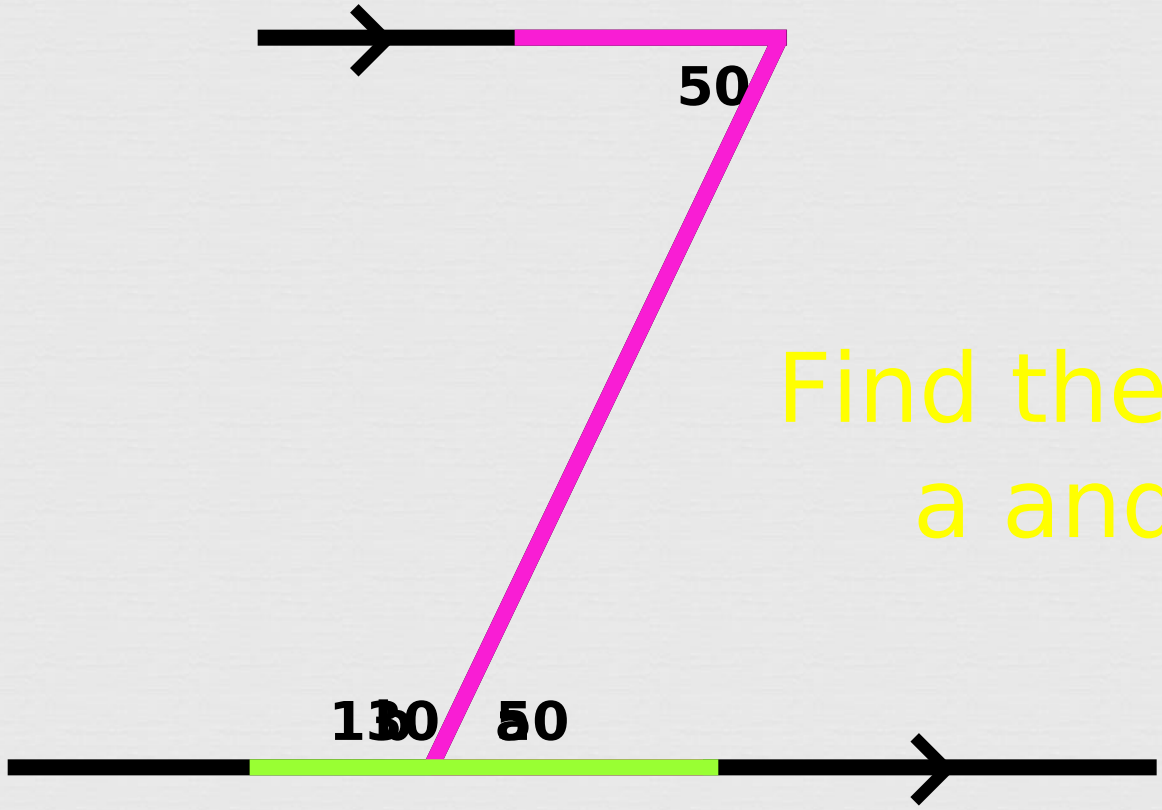
Alternate Angles



Find the value of d ?

Angles

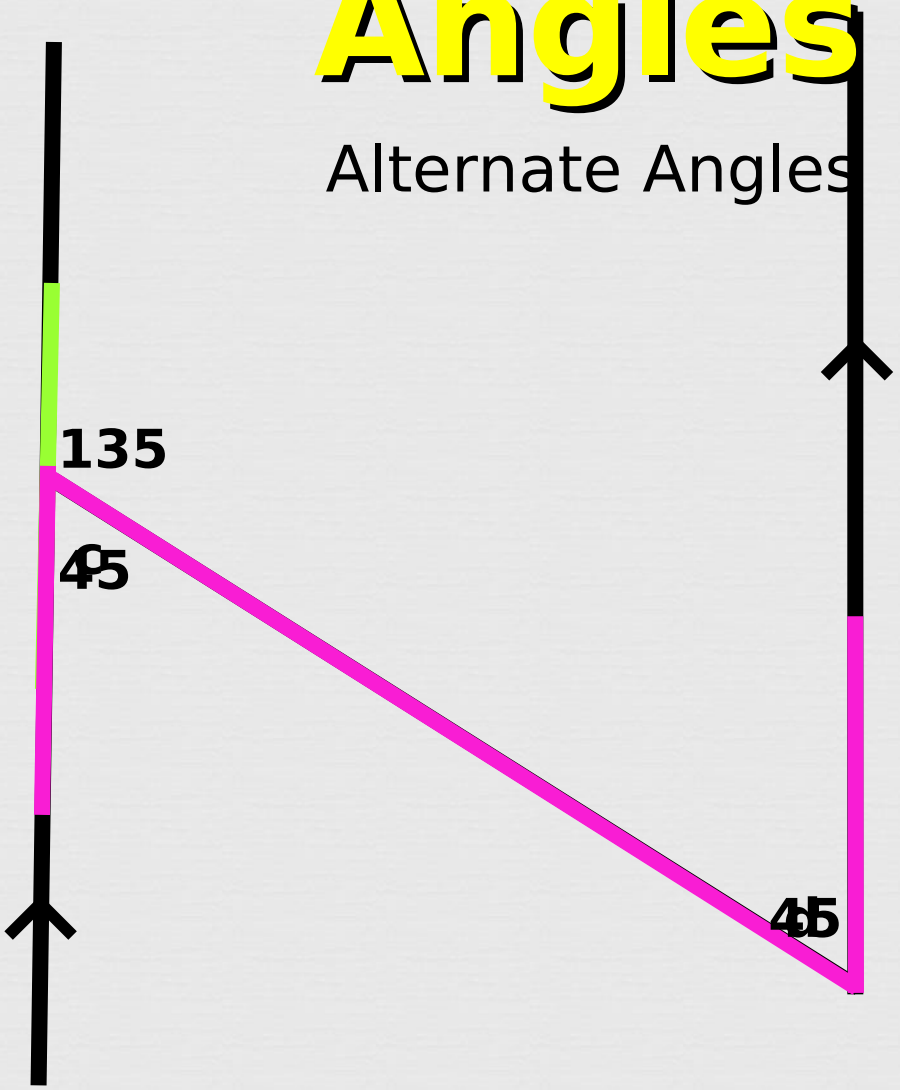
Alternate Angles



Find the value
a and b ?

Angles

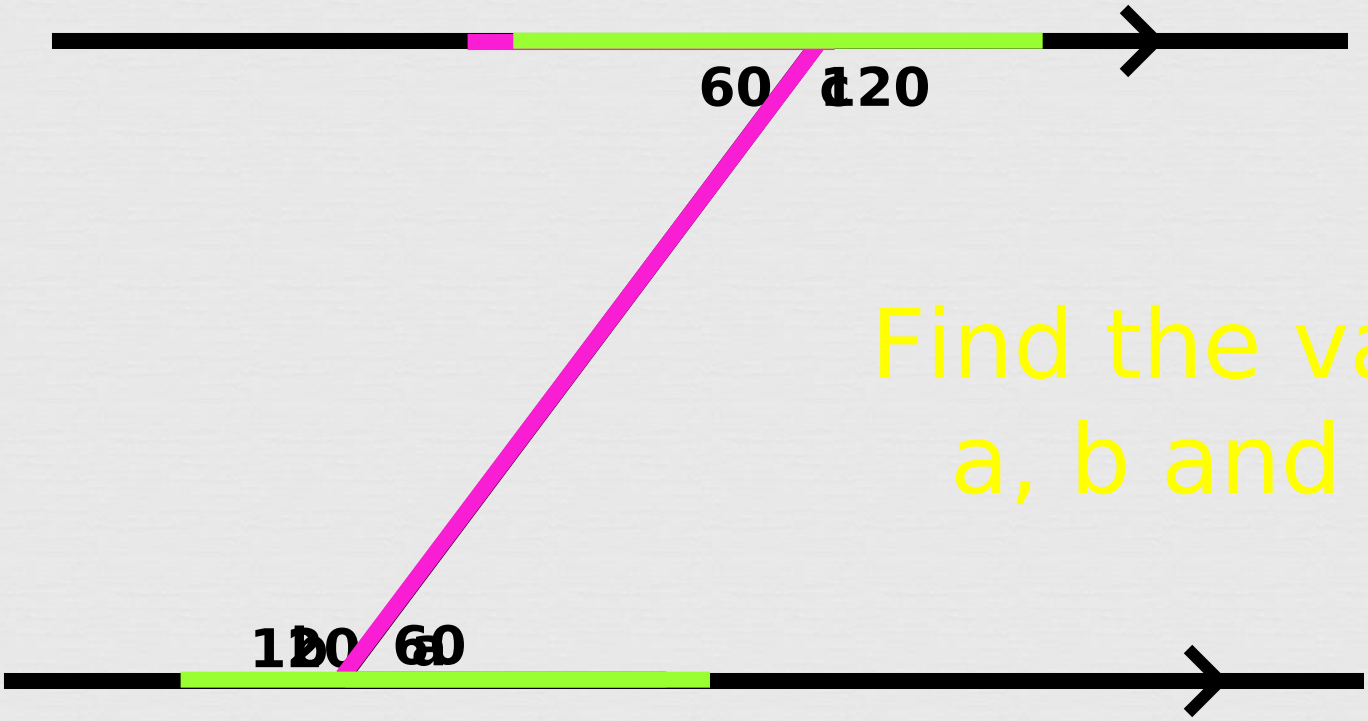
Alternate Angles



Find the value of c and d ?

Angles

Alternate Angles



Find the value
a, b and c ?