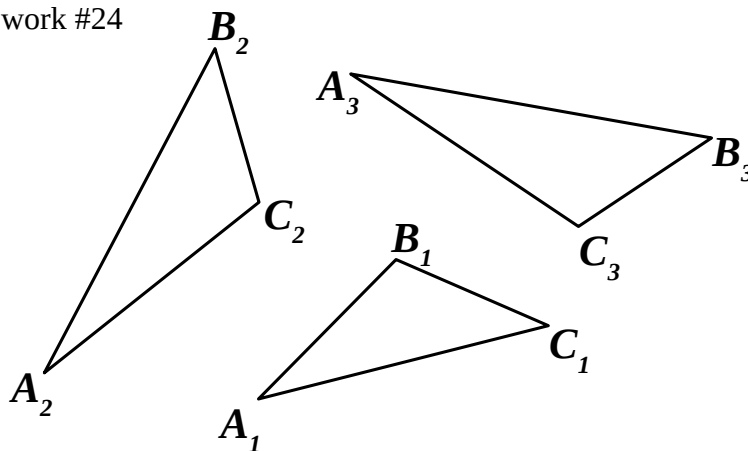


Congruency of triangles:

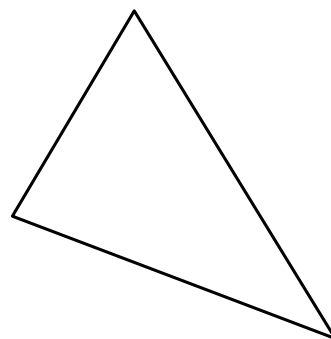
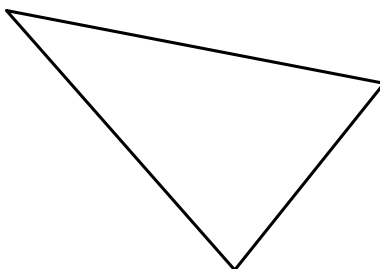
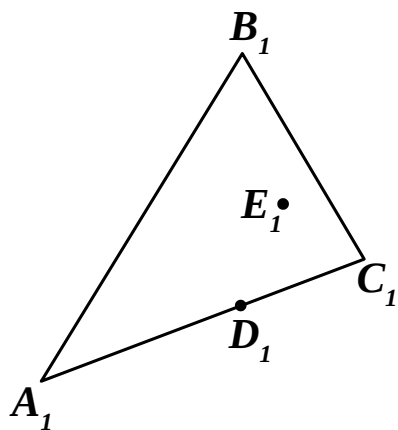
Two triangles are congruent if their points may be matched in a way that preserves distances.

1. Find which triangles on the picture are congruent.



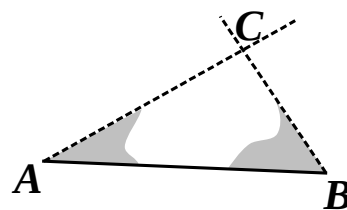
Two triangles are equal when all three their sides are equal

2. Show that all three triangles are congruent. Find points matching points A_1 through E_1 .



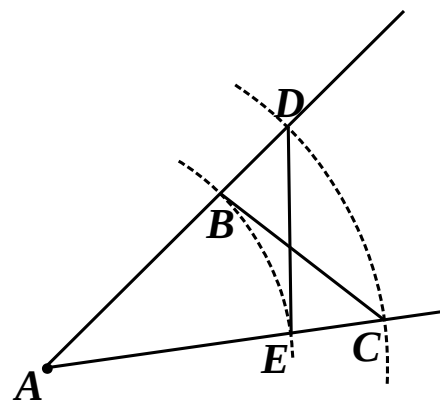
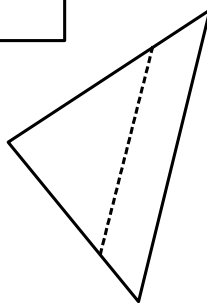
Major Traits for the congruency of triangles:

1. By three sides;
2. By two sides and an angle between them;
3. By a side and two adjacent angles.



In congruent triangles equal angles are opposite of the equal sides.

Two triangles with all equal angles may not be congruent.



Distributive property with squares and crossproducts:**3. Remove parenthesis:**

$2 \cdot (x + a + 1) = \underline{\hspace{2cm}}$

$x \cdot (x + a + 1) = \underline{\hspace{2cm}}$

$2 \cdot (x - 1 + w) = \underline{\hspace{2cm}}$

$x \cdot (x - 1 + w) = \underline{\hspace{2cm}}$

$2x \cdot (x + 3 + y) = \underline{\hspace{2cm}}$

$2x \cdot (x - 5 + y) = \underline{\hspace{2cm}}$

$x \cdot (2x + 7 + a) = \underline{\hspace{2cm}}$

$x \cdot (2x - 2 - a) = \underline{\hspace{2cm}}$

$3x \cdot (2x + 4 - 3y) = \underline{\hspace{2cm}}$

$3x \cdot (2x - 9 + 4y) = \underline{\hspace{2cm}}$

4. Plot images of the shapes using the lines of symmetry: