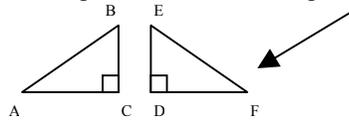




5 minutes

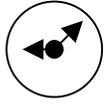
Public Class Work: Reviewing Previous Work

The teacher asks students to review congruent triangles. She draws on the blackboard a pair of right triangles she states are congruent.



The teacher reads each question as students write individually

1. Which angle is equal to $\angle A$?
2. Which angle is equal to $\angle D$?
3. * If $\angle A = 30^\circ$, $\angle B = 60^\circ$, what size is $\angle E$?
4. What size is $\angle D$?
5. Which line is equal to BC ?
6. Which line is equal to EF ?
7. * If $AB = 5$ cm, $BC = 3$ cm, $AC = 4$ cm, how long is DF ?
8. How long is EF ?
9. $\triangle ABC$ and $\triangle FED$ are congruent. Write this in a shorthand way
10. Which is the hypotenuse of $\triangle ABC$?



5 1/2 minutes

Public Class Work: Posing/Clarifying the Task

The students are asked to read through the instructions on the "Congruence Group Work" worksheet as the teacher goes through it.

The teacher states "What you're doing is actually finding the rules for a pair of congruent triangles and you're trying to find the minimum rules. So the task you need to produce a list of instructions so that anyone following them will construct exactly the same triangle. It's got a list of what you need. And each person is to construct a triangle without showing the rest of your group and you write down the steps of how you did it. All right?"



23 1/2 minutes

Private Class Work: Small Groups Work on Task

The teacher circulates, helping students as they ask her questions.

She directs students to start reading theirs to their group as soon as everyone has finished the triangle.

Congruence Group Work



Task:
You need to produce a list of instructions so that anyone following them will construct exactly the same triangle.

You will need:
Protractor, compass, ruler, scissors, glue, pencil

Steps:
Each person in the group is to:

1. Construct a triangle on the next page, without showing your group.
2. Write down the steps that you did as clearly as you can.

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- As a Group take turns to:**
3. Read your instructions to your group.
 4. The other students in the group must follow the instructions and then draw your triangle on the coloured page.
 5. Cut out the triangles and check if they are congruent.
 6. Evaluate your instructions.
 7. If the triangles are not congruent, change the instructions to make them clearer and repeat steps 3, 4 and 5.
 8. Paste the final triangles from your group on the following page.
 9. What was the minimum number of sides or angles that your friends needed to know, to construct your triangle? Discuss with your group. Write them down.
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-
-

Repeat for each person in your group.



5 1/2 minutes

Public Class Work: Whole Class Discussion of Methods for Constructing Congruent Triangles

The teacher notes 2 methods that most students have used. She elicits 2 more methods and names/labels each.



1 minute

Public Class Work: Teacher assigns page 343, Activity 17.1. for practice problems.



4 1/2 minutes

Private Class Work: Students Work Individually on Practice Problems

Students are instructed to write SSS, SAS, AAS or RHS for problems asking if the triangles are congruent and why.

Teacher circulates answering questions and checking homework.



1 1/2 minute

Public Class Work: Whole Class Assigning Homework/Clean-Up The teacher assigns the rest of the page 344 for homework—down to number four.