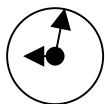**4 1/2 minutes**

Public Class Work: Students review powered numbers

The first 3 minutes of class are spent on a review of what they worked on last class—the concept of powered numbers. The teacher then assigns each person one problem from a worksheet and asks the students to calculate it.

4 minutes

Private Class Work: Students work individually on the problems assigned

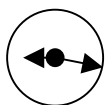Teacher circulates as students work on problems A,B,C,D,E,F,G and H.

8 minutes

Public Class Work: Students share their answers to the problems with the whole class

The teacher then asks several students to do their problems on the black board, which she opens up to provide more space. The teacher asks each student to name the last calculating performance they must do in the problem, and from which two numbers they got the result.

6 minutes

Public Class Work: Discussing which powered numbers can and can't be added together

The first three minutes students review page 24 and the power of a number by going over a few problems.

The teacher directs students to p. 25 and asks, "When we add $2a^3 + 3a^3$, what do we call it? What is a^3, how do I imagine it?" SS reply "cube". T responds "volume of a cube".

The T asks: "which ones can't be calculated and why?"
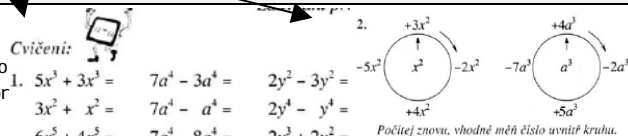

2 1/2 minutes

Private Class Work: Students work individually on page 25

The teacher assigns the students the problems on page 25 and passes out strips of paper to "answer the questions and write the answers to the problems."

2 1/2 minutes

Public Class Work: Reviewing Answers

Lukas states that $2y^3 + 2y^2$ can't be solved because there are two different exponents. Martin explains # 2: "we will either use – or + depending on the circle". Several students suggest starting in the middle of the circle. They orally calculate both circles.

7 minutes

Private Class Work: Students work individually

The teacher passes out a worksheet for students to work on individually. Some students got a worksheet with assignments A and B, others got C and D. The teacher circulates as students work, answering questions, helping students and reminding them to verify their work.

2 /1/2 minutes

Public Class Work: Assigning students to teams to check their results

The teacher instructs students with the same assignments to meet together to discuss and check their work. They are instructed to "compare the answers and if your results come out different, discuss it".

3 minutes

Private Class Work: Students work in teams

The teacher works with three students that have finished with their groups. She asks them how they came up with number 5. A student replies: "because we substituted x with one and one minus one equals to zero. So the xa cube equals to zero."

5 minutes

Public Class Work: Going over a previous problem

The teacher reads the students Thursday's problem since "they don't have it in front of them".

Mr. Blacksmith forged Ritirov's horses. How do you want to trade? Horseshoes are for free, Mr. But you must pay me for the 16 nails, which I used. For the first nail, give me two pennies, for the second nail, give me four pennies, and for each additional nail pay me twice as much as the previous nail. This low amount will not even equal to one dollar.

The Teacher asks Martin to come to the board and write what he did on his paper. She asks the class: "can you figure out reasoning behind all of this? Is there some kind of correlation?" A student replies 2nd power.

2	/ 1
4	/ 2
8	/ 3
16	/ 4
32	/ 5
64	/ 6
128	/ 7

The teacher assigns 6 "simplifying expressions" problems for homework.