**Georgia: Equivalent Fractions**

Georgia: So now we have 12/16ths. We want to find our greatest common factor not our least common multiple. We want our greatest common factor. Our greatest common factors help us reduce, so we want to find some factors for 12 and 16, what would be our factors for 12?

Students: 2, 12

Georgia: What times what equals 12?

Students: 6 and 2. 4

Georgia: 6 times 2, 4 and what?

Student: 3.

Georgia: 4 and 3. What else?

Student: 12 and 1.

Georgia: 12 and 1. Anything else for 12?

Student: [inaudible] four…1, 2, 3, 4, 6, and 12.

Georgia: Okay, so we have all our factors for 12. What about for 16?

Student: 4 times 4…

Georgia: 4 times 4. Hmm?

Student: 2 times…

Georgia: 2 and 8 ...

Students: 1 and 16, 16 and 1.

Georgia: And 16 and 1. So do we see a greatest common factor there?

Student: 4.

Georgia: Is that our greatest common factor? Because we don’t have 8 up here, we don’t have 16 up here, so our greatest common factor’s going to have to be 4.

Student: It’s a low number.

Georgia: It’s a low number. What do we do with that 4? Once we find our greatest common factor we want to reduce this, and to make something smaller, what do we do? Times or divide?

Students: Times. Divide.

Georgia: We want to make it smaller.

Students: Divide.

Georgia: So we divide by 4 to the top and the bottom, because we want to make an equivalent fraction. [student sneezes] Bless you. So 4 into 12 is what?

Student: Three fourths. Or three.

Georgia: 4 goes into 12 three times. 4 goes into 16 ...

Student: 4.

Georgia: Four times. Are those equivalent fractions?

Student: Yeah.

Georgia: Yes, they are, because if we go back and times them, both by 4, we get 12/16ths again, so instead of making a bigger equivalent fraction, we’re making a smaller equivalent fraction by dividing. And if remember when we’re using our patterns to make the numbers smaller, or when the number’s getting smaller, we divide and when we want the number to get bigger, we times. Just like over here.