

Grade 6 Student Responses: What do you notice?

Robert
Both trees grew the same amount 6 ft.
B is always gone to be 2 ft. taller
than A.

Dan
A grew 75% of its height, but B
grew a little less - 60% of its
height.

Grade 6 Student Responses: What do you notice?

P.J.

B climbed higher but not higher. I mean its higher but it didn't climb more feet because it was already higher. It didn't grow more. Its just higher. It seem like A grew more even though it didn't grow higher than B.

Pete

B grew more because it grew to 16'. That's more than A grew.

Relative & Absolute Thinking

Distinguishing between situations that require *multiplicative thinking* from those that do not is one of the most difficult tasks for children. One difficulty is that our language does not supply us with new words with which to ask multiplicative questions. The same words that we use to discuss whole number relationships, take on different meanings in different situations. For example, when we ask 'Which one is *larger*?' in the context of comparing two lengths, additive or absolute thinking is appropriate. However, if we ask 'Which one is *larger*?' in the context of an area problem or an enlargement problem, multiplicative thinking is required. In other words, part of *the challenge* is to attach new meanings to old words and to associate new contexts with appropriate operations—additive and multiplicative. (Lamon, 2006, p. 33)


Orangey Juice Activity



Suppose there are two pitchers with orange drink at the lunch table. The orange drink in Pitcher A is made by mixing 1 can of orange concentrate with 3 cans of water. The mixture in Pitcher B is made by mixing 2 cans of orange concentrate with 6 cans of water. Which will taste more orangey, the mixture in Pitcher A or the mixture in Pitcher B?

Proportional Reasoning

Q: How can "oranginess" be quantified?



Taking Stock...

- What did we learn today?
 - Something old, new, borrowed
- More specific takeaways
 - From Trees Activity
 - Important definitions/ideas/results
 - From Oranginess Activity
- Questions you still have