Equals signs notes and practice:

Education research report article:

1. According to Capraro, the equals sign is different from add, subtract, multiply and divide because it shows…

2. a. Give an example of a "running equals sign"

b. Is a running equals sign a correct or an incorrect use of the "=" symbol?

3. What do these researchers identify as a likely cause or partial cause of the children's misunderstandings about the equals sign in the US?

Videos

4. What is the difference between an equation and an expression?

5. Are children more likely to misunderstand the meaning of the equals sign in grade 1 or grade 5?

6. If children don't understand the balance meaning of the equals sign, what do they probably think it means?

7. What is another helpful word/phrase teachers can use besides "equals" when reading the "=" sign in an equation?

8 (notes). Show two ways of fixing this unbalanced equation:
$$7 \times 5 = 35 + 7 = 42$$

9. (practice). Show two ways of fixing this unbalanced equation:
$$3 \times 4 = 12 \div 2 = 6 \times 4 = 24 + 16 = 40$$

10. Write a variety of true/false equations that help teach the meaning of the equals sign. Include at least one that is very easy and one that is tricky.

11. Write a variety of missing number problems that help teach the meaning of the equals sign. Include at least one that is easier and one that is tricky.

The Meaning of the Equals sign: level 3

11. a. In illustration 1, what question are all of the children answering?

b. Luke: What answer did Luke give? Does his answer show that he understands the meaning of the equals sign in the problem? What was his reasoning?

c. Cameron: What answer did Cameron give? Does his answer show that he understands the meaning of the equals sign in the problem? What was his reasoning?

d. Fiona: What answer did Fiona give? Does his answer show that she understands the meaning of the equals sign in the problem? What was her reasoning?

e. Chris: What answer did Chris give? Does his answer show that he understands the meaning of the equals sign in the problem? What was his reasoning?

12. Illustration 2: give an example of a common incorrect use of the equals sign

13. Illustration 3: How do calculators use the equals sign? How is the calculator meaning different from the balance meaning?