**Finding and using structure:**

For each of 1-3 figure out a way to do the computation that could be a mental math strategy (probably different from the standard algorithm). Show your thinking process.

1. 28 + 35 =

2. 91 – 42 =

3. 19 × 3 =

4. Choose a strategy from the video <http://www.insidemathematics.org/classroom-videos/public-lessons/4th-grade-number-operations-multiplication-division/problem-3-part-b>

to solve 26 × 4 =, and explain the thinking process.

For each of 5-8 figure out a way to say whether the equation is true or false using relational thinking (rather than doing all of the computations). Explain your thinking process.

5. 24 + 78 = 78 + 20 + 2 + 2

6. 7 × 18 = 18 + 18+ 18+ 18+ 18+ 18+ 18+ 18

7. 60 × 48 = 6 × 480

8. 278 + 96 = 280 + 98

For each of 9-12, figure out a way to find the missing number using relational reasoning (rather than doing all of the computations or formal algebra). Explain your thinking process.

9. 97 – 18 = 100 – 18 - 

10. 20 × 7 = (19 × 7) + 

11. 43 + 28 =  + 42

12. 63 – 28 = 60 – 20 + 3 - 

13. watch the part of this lesson (where children are discussing 32 + 28 = 33 + 27), starting at 12:00 (12 minutes in):

<http://www.insidemathematics.org/classroom-videos/number-talks/4th-grade-math-can-this-be-true/number-talk>

Describe one of the relational ways that children explained why the number sentence is true.