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# NUMBER TALKS FOR ALGEBRA

Awesome Prompts for Algebraic Thinking

created by Jackie Palmquist & Deb Kimminau

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## Sample Page

Classroom ready  
Projectable prompt

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Talk Tips

Differentiation  
Backup/Extensions

Student tested  
Sample Answers

Personalize  
Notes

Color coded for  
quick reference

**To solve for  $x$ ,  
what would you do first?**

$$4 + 3(2 + 3x - 1) - 5 = 10 + 6x$$

### Talk Tips

List all first steps suggested, and work out each suggestion to show whether the results are the same. Encourage students to determine where any order of operations rules were broken and eventually identify the correct answer.

### Backup/Extension Problems

$$\begin{aligned} 2(6 + 3x - 4) &= 8 + 2 \\ 5(x - 1 + 2x) &= 15 - 2x + 7x \\ 4 - 5(2x - 4 - 6x) &= 9x - 8 + 7x \end{aligned}$$

### Sample Answers:

Answers:	Common Misconceptions:
Distribute 3	4+3
2 - 1 (in parentheses)	2+3
4 - 5	10+6

### Notes:

Do you see another way someone might start?  
Do you think there is a best first step? Explain.  
If you chose again, would you choose the same first step?

Linear Equations

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