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## Homework sheet: Alg2H

| 1. Page 28, questions: | 2. Page 29, questions: |
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| Which of the following are identities: |  |
| $7 y-1=23-5 y$ | 55. $3(x-4)=3 x-4$ |
| 36. $8-5 x=x-16$ | 57. |
| $7(x-3) \cdot \frac{1}{7}=x-3$ |  |$\quad$|  |
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3. (Book1 $16^{* *}$ ) On a road map of Uganda, the scale is $1: 1,500,000$. The distance on the map from Kampala to Ft. Portal is 17 cm . What is the real world distance in km between these two cities?
4. (Book1 13**) Pick any number. Add 4 to it and then double your answer. Now subtract 6 from that result and divide your new answer by 2 . Write down your answer. Repeat these steps with another number. Continue with a few more numbers, comparing your final answer with your original number. Is there a pattern to your answers?
5. (Book1 33**) Before you are able to take a bite of your new chocolate bar, a friend comes along and takes $1 / 4$ of the bar. Then another friend comes along and you give this person $1 / 3$ of what you have left. Make a diagram that shows the part of the bar left for you to eat.
6. (Book1 34**) Later you have another chocolate bar. This time, after you give away $1 / 3$ of the bar, a friend breaks off $3 / 4$ of the remaining piece. What part of the original chocolate bar do you have left? Answer this question by drawing a diagram.
