**Equations with Multiple Variables and Repeated Variables**

Describe different ways that students might solve the following equations (limiting the domain of possible answers to whole numbers).

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| Equation | Description of Solution(s) |
| 1. x + y =10 |  |
| 2. p – r = 6 |  |
| 3. 2 × v + y = 14 |  |
| 4. w + w = 12 |  |
| 5. 5 × r – r = 20 |  |
| 6. d + d – 5 = 13 |  |
| 7. 3 × p + p + 2 – p = 17 |  |
| 8. 6 × q = 2 × q + 24 |  |
| 9. v + v + y = 14 |  |
| 10. A + 2A + 3A = 30 |  |

Adapted from Carpenter, Franke, & Levi. (2003) *Thinking Mathematically* (Ch. 5, pp 65-77).