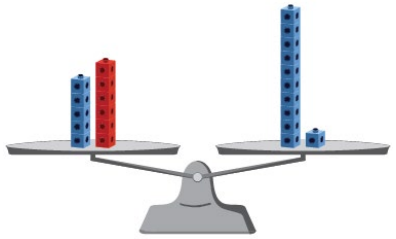
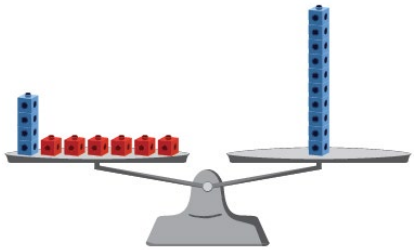
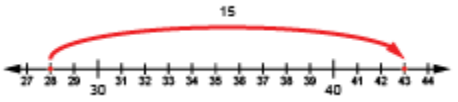
Patterning and Algebra

# Activity 13 Assessment
## Consolidation

### Solving One-Step Addition and Subtraction Equations

| Understands balance as equality | Uses concrete materials to solve for unknown | Uses number relationships (inverse operations) |
|---|---|---|
|  |  |  |
| "5 + 6 equals 11." | 4 + ☐ = 10<br>"I added red cubes, one at a time, until the pans balanced; ☐ = 6." | 28 = ☐ − 15<br>"I rewrote the equation as an addition equation: 28 + 15 = ☐." |

### Observations/Documentation

Patterning and Algebra

# Activity 13 Assessment
## Consolidation

| Solving One-Step Addition and Subtraction Equations (con't) | | |
|---|---|---|
| Decomposes and recomposes numbers (uses associative property)<br><br>28 + 15 = 28 + 2 + 13<br>28 + 2 + 13 = 30 + 13<br>30 + 13 = 43 | Describes a situation for a given equation with an unknown<br><br>20 − ☐ = 13<br>"I had $20. I spent some money and now I have $13. How much did I spend?" | Uses strategies efficiently and flexibly to solve equations of different types (start, result, and change unknown)<br><br>27 = Δ − 18<br>"I rewrote using addition: 27 + 18 = Δ. Then, I used mental math: 27 + (18 + 2) = 47, and 47 – 2 = 45." |
| **Observations/Documentation** | | |
| | | |

**Patterning and Algebra**

# Activity 13 Assessment
## Consolidation

| Variables and Symbols | | | |
|---|---|---|---|
| Uses equal sign as balance (left side equals right side) and not equal sign as imbalance<br><br>18 + 16 = 10 + 24<br>18 + 16 ≠ 24 – 10<br><br>"The equal sign means that the numbers on both sides are worth the same amount." | Uses symbols to represent unknown quantities<br><br>18 + ☐ = 34<br><br>"I used a box to represent the unknown, but I could have used a different shape." | Understands the unknown represents one quantity/value<br><br>18 + ☐ = 34<br><br>"The box represents a number that would be added to 18 to make 34. No matter what the symbol is, it will always represent 16." | Solves equations flexibly<br><br>18 + ☐ = 34<br>34 − ☐ = 18<br>34 – 18 = ☐<br><br>"In all of these equations, the symbol represents the same number, 16." |
| **Observations/Documentation** | | | |
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