Adding and subtracting   
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1. **Adding and subtracting fit together**

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| Whole-part-part diagram | Family of number sentences | |
| |  |  | | --- | --- | | 12 | | | 8 | 4 | | 8 + 4 = 12  4 + 8 = 12  12 – 4 = 8  12 – 8 = 4 | 12 = 8 + 4  12 = 4 + 8  8 = 12 – 4  4 = 12 – 8 |

1. **Four types of word problems**

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| **DYNAMIC MOVIE OR VIDEO** | **STATIC OR STILL PHOTO** |
| **Change increase**  I have 8 apples. I am given some more apples. Now I have 12 apples.  start + change = result | **Collection**  I have some 12 apples. 8 are green, the rest are red. How many apples are red?  whole = part + part |
| **Change decrease** | **Compare** |
| I have 12 apples. My brothers and sisters ate some. Now there are 8 apples. How many apples were eaten? | I have 12 apples. You have 8 apples. How many more apples do I have than you? |
| start - change = result | whole = part + part |

1. **Drawing adding and subtracting pictures**

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| **DYNAMIC MOVIE OR VIDEO** | **STATIC OR STILL PHOTO** |
| 7 – 5 = …  Start with 7 and take-away 5:    You are left with **2.** You land on **2.**  The result is **2**.  7 – 5 = 2 | 7 – 5 = … or 5 + … = 7  Compare 7 and 5:    7 is **2** more than 5.  5 is **2** less than 7. The difference between 5 and 7 is **2.**  7 – 5 = 2 |