



Math Olympiad and Problem Solving Program

F110 - Introductory Problem Solving

Problem Set 19.2 - Remainder

Name:

Date:

1.
2.
3.
4. The total number of apples that were distributed is $6 \times 3 = 18$. The remaining apples that were not distributed must total less than 6, because if we have 6 or more, we would have had enough to distribute them to the students. The minimum number of apples in the bag happens when there is only 1 remaining apple: $18 + 1 = \boxed{19}$. The maximum number of apples in the bag happens when there are 5 remaining apples: $18 + 5 = \boxed{23}$.
5.
6.
7.
8.
9.
10. The next day they will wear the same shirt to school will be when Sophia is on another fourth day and Jessica is on another third day. In other words, the least common multiple of 4 and 3: 12 days later. This happens on .