Instruction: Show your work. First draw the models to represent the numbers and then solve the problems.

1. $\boxed{825}$

2. Mrs. Lee baked 256 cookies on Monday, and she cooked $256+76 = 332$. She baked $256+332 = 588$ total. $588 \div 30 = 18R18$. Her last box has 18 in it, so she will need $30 - 18 = 12$ more cookies to fill it. $\boxed{12}$

3. $\boxed{6}$

4. (a) $\boxed{13}$

   (b) $\boxed{6}$

5. $\boxed{245}$

6. There are $58 \times 6 = 348$ books to be carried. The worker needs to make $348 \div 16 = 21R12$ trips. Since the last remainder of books still take a whole trip, the worker must make $21+1 = \boxed{22}$ trips.

7. There are four types of seats: front seats for adults (\$75), front seats for kids (\$37.50), back seats for adults (\$25), and back seats for kids (\$12.50). Now we find out how many of each type are sold, and multiply by the price to get the total money collected.

   First 5 rows $\times$ 25 seats per row = 125 seats in the first 5 rows
   10 children in the first five rows $\times$ \$37.50 = \$375
   $125 - 10 = 115$ adults in the first five rows $\times$ \$75 = \$8,625

   Last $45 - 5 = 40$ rows $\times$ 25 seats per row = 1000 seats in the last 40 rows
   300 children in the last rows $\times$ \$12.50 = \$3,750
   $1000 - 300 = 700$ adults in the last rows $\times$ \$25 = \$17,500

   Add up all the money collected: $375 + 8625 + 3750 + 17500 = \boxed{\$30,250}$

8. Not making any loss means that he will sell the shirts at the same price he bought them. After throwing away the torn shirts, Mr. Shoppe has 15 dozen shirts. He has $15 \times 12 = 180$ shirts to sell. He must make back the \$2754 that he spent. So he must sell each shirt for $\$2754 \div 180 = \boxed{\$15.30}$

9. Mr. Black earns $dir \times 185 = \$370$ for all the boxes he sold. He gets \$5 for each 15 boxes he sells, so calculate $185 \div 15 = 12R5$. He only sold 12 bundles of 15, so we ignore the remainder. So Mr. Black gets an extra $\$5 \times 12 = 60$. So his total income is $\$370 + \$60 = \boxed{\$430}$

10. Since 6 cases weigh 5430 g, each case (case + a dozen cartons) weighs $5430 \div 6 = 905$. Then we are given that two cases each half packed weigh 1290. Meaning case + case + half dozen cartons + half dozen cartons = 1290. We can simplify this equation to case + case + dozen cartons = 1290. We know that case + dozen cartons = 905 from the first statement. So substitute: case + (case + dozen cartons) = case + 905 = 1290. So we can subtract $1290 - 905 = 385$ = case. This is the answer to part b. Now we can subtract the case weight from the total weight to find the weight of the dozen cartons. In other words, case + dozen cartons = 905, and case = 385, so 385 + dozen cartons = 905. Then the dozen cartons = $905 - 385 = 520$, which is part a.

    (a) $\boxed{520}$

    (b) $\boxed{385}$