1. $\boxed{204}$

2. Notice that if we add in pairs, which we can do because of associativity, we get $-1$'s:
$$50 - 51 + 52 - 53 + 54 - 55 + 56 - 57 + 58 - 59 + 60 = -1 - 1 - 1 - 1 - 1 + 60 = \boxed{55}$$

3. $\boxed{424}$

4. $1 + 2 + 3 + \cdots + 20 + 21 + 22$. We can add the first and the last, the second and the second to last, and so on so that we get 23 added 11 times:
$$\begin{aligned} 1 + 2 + 3 + \cdots + 20 + 21 + 22 & \\ &= (1 + 22) + (2 + 21) + (3 + 20) + \cdots \\ &= 23 + 23 + 23 + \cdots \\ &= 11 \times 23 = \boxed{253} \end{aligned}$$
23 is added 11 times because we have a total of 22 numbers and every 2 numbers is added to give a 23. Therefore, $22 \div 2 = 11$ 23's.

5. $1 + 3 + 5 + \cdots + 95 + 97 + 99$. Again, add the first and the last to get 100. We now need to count how many 100's we are adding together. Since there are 50 numbers and every two numbers adds to 100, we have $50 \div 2 = 25$ 100's:
$$\begin{aligned} 1 + 3 + 5 + \cdots + 95 + 97 + 99 & \\ &= (1 + 99) + (3 + 97) + (5 + 95) + \cdots \\ &= 100 + 100 + 100 + \cdots \\ &= 25 \times 100 = \boxed{2500} \end{aligned}$$

6. $\boxed{460}$

7. $\boxed{165}$

8. $\boxed{45}$

9. $10 + 11 + 12 + \cdots + 97 + 98 + 99$. Add the first and the last to get 109. Now we count how many 109's we are adding together. There are $99 - 10 + 1 = 90$ numbers and every two numbers adds to 109, so we have $90 \div 2 = 45$ 109's:
$$\begin{aligned} 10 + 11 + 12 + \cdots + 97 + 98 + 99 & \\ &= (10 + 99) + (11 + 98) + (12 + 97) + \cdots \\ &= 109 + 109 + 109 + \cdots \\ &= 45 \times 109 = \boxed{4905} \end{aligned}$$

10. $\boxed{450}$