1. $\boxed{-11}$

2. $\boxed{-4}$

3. You can never ever ever just drop absolute values. You have to make conditions first.

   Case 1: the things inside the absolute values are positive. Then $x - 1 \geq 0$, or $x \geq 1$. If we know that $x \geq 1$, then $x + 1 \geq 0$ and $x - 1 \geq 0$, so now we can drop the absolute values. Then we reduce to $x + 1 - x + 1 = 2$. So $\boxed{\text{if } x \geq 1, \text{ we simplify to } 2}$.

   Case 2: the thing inside one abs. value is positive and the other is negative. This happens when $x - 1 < 0$ and $x + 1 > 0$, or when $x < 1$ and $x > -1$. So while $-1 < x < 1$, then $x - 1$ is negative, so in order to drop the abs. value signs, we have to put a negative sign in front to cancel the negative and make it positive. So $|x + 1| - |x - 1|$ becomes $x + 1 - (-(x - 1)) = x + 1 + (x - 1) = 2x$. So $\boxed{\text{if } -1 < x < 1, \text{ we simplify to } 2x}$.

   Case 3: both things inside the abs. values are negative. Then $x + 1 \leq 0$, or $x \leq -1$. Now we have to put negatives in front of both quantities, and we get $-(x + 1) - (-(x - 1)) = -x - 1 + x - 1 = -2$. So $\boxed{\text{if } x \leq -1, \text{ we simplify to } -2}$.

   A correct answer has all three parts.

4. Use the same method as the previous problem.

   Case 1: the things inside the absolute values are positive. Then $x - \frac{1}{3} \geq 0$, or $x \geq \frac{1}{3}$. If we know that $x \geq \frac{1}{3}$, then $x + \frac{1}{3} \geq 0$ and $x - \frac{1}{3} \geq 0$, so now we can drop the absolute values. Then we reduce to $x - \frac{1}{3} + x + \frac{1}{3} = 2x$. So $\boxed{\text{if } x \geq \frac{1}{3}, \text{ we simplify to } 2x}$.

   Case 2: the thing inside one abs. value is positive and the other is negative. This happens when $x - \frac{1}{3} < 0$ and $x + \frac{1}{3} > 0$, or when $x < \frac{1}{3}$ and $x > -\frac{1}{3}$. So while $-\frac{1}{3} < x < \frac{1}{3}$, then $x - \frac{1}{3}$ is negative, so in order to drop the abs. value signs, we have to put a negative sign in front to cancel the negative and make it positive. So $|x - \frac{1}{3}| + |x + \frac{1}{3}|$ becomes $-(x - \frac{1}{3}) + x + \frac{1}{3} = -x + \frac{1}{3} + x + \frac{1}{3} = \frac{2}{3}$. So $\boxed{\text{if } -\frac{1}{3} < x < \frac{1}{3}, \text{ we simplify to } \frac{2}{3}}$.

   Case 3: both things inside the abs. values are negative. Then $x + \frac{1}{3} \leq 0$, or $x \leq -\frac{1}{3}$. Now we have to put negatives in front of both quantities, and we get $-(x - \frac{1}{3}) - (x + \frac{1}{3}) = -x + \frac{1}{3} - x - \frac{1}{3} = -2x$. So $\boxed{\text{if } x \leq -\frac{1}{3}, \text{ we simplify to } -2x}$.

   A correct answer has all three parts.

5. If $|x| = 5\frac{2}{3}, |y| = 1\frac{1}{3}$, then $x = \pm 5\frac{2}{3}$ and $y = \pm 1\frac{1}{3}$. So the expression $x - y$ could have four possibilities:

   $5\frac{2}{3} + 1\frac{1}{3} = 7$

   $5\frac{2}{3} - 1\frac{1}{3} = 4\frac{1}{3}$

   $-5\frac{2}{3} + 1\frac{1}{3} = -4\frac{1}{3}$

   $-5\frac{2}{3} - 1\frac{1}{3} = -7$

   So $x - y =$ $\boxed{\pm 7, \pm 4\frac{1}{3}}$

6. Again, there are 3 cases.

   Case 1: $|a| < |b| < |c|$. Imagine that $c = 10$, $b = -5$, and $a = -1$ if it helps you visualize it. Then $a + c > 0$, $b + c > 0$, and $a + b < 0$. So we put a negative around $a + b$ and reduce: $|a + c| + |b + c| - |a + b| = a + c + b + c - (-(a + b)) = a + c + b + c + a + b = \boxed{\text{2(a+b+c)}}$

   Case 2: $|a| < |c| < |b|$. Imagine that $b = -10$, $c = 5$, and $a = -1$ if it helps you visualize it. Then $a + c > 0$, $b + c < 0$, and $a + b < 0$. So we put a negative around $a + b$ and $b + c$ and reduce: $|a + c| + |b + c| - |a + b| = a + c - (b + c) - (-(a + b)) = a + c - b - c + a + b = \boxed{\text{2a}}$

   Case 2: $|c| < |a| < |b|$. Imagine that $b = -10$, $a = -5$, and $c = 1$ if it helps you visualize it. Then $a + c < 0$, $b + c < 0$, and $a + b < 0$. So we put a negative around each quantity and reduce: $|a+c|+|b+c|-|a+b| = -(a+c)-(b+c)-(-(a+b)) = -a-c-b-c+a+b = \boxed{\text{-2c}}$

   A correct answer has all three parts.

7. $\boxed{\text{-15}}$

8. $\boxed{1}$

9. $\boxed{8}$

10. $\boxed{2}$