Solve: Solve the following

1. $3x + 4y + 1 - 3x + 5y + 1$
2. $2x + 2y + 3 - 3x + y + 1$
3. $x + y + 3 - x + 3y + 3$
4. $4x + 3y + 5 - x + 3y + 3$
5. $2x + 3y + 1 - 2x + y + 1$
6. $3x + 5y + 4 - 5x + y + 4$
7. $x + 3y + 2 - 2x + 3y + 2$
8. $2x + 4y + 4 - x + 2y + 4$
9. $4x + 5y + 3 - 4x + 2y + 2$
10. $3x + 4y + 3 - 4x + 2y + 4$
11. $x + 5y + 5 - 5x + y + 2$
12. $5x + 3y + 3 - 3x + 2y + 2$
13. $2x + 4y + 2 - 4x + 3y + 4$
14. $x + 3y + 5 - 5x + 3y + 3$
15. $5x + 5y + 2 - 4x + y + 3$
16. $5x + 5y + 4 - 4x + 3y + 2$
17. $4x + 4y + 5 - 2x + 4y + 4$
18. $4x + 4y + 4 - 4x + 2y + 2$
19. $5x + 5y + 2 - 3x + 2y + 3$
20. $4x + 5y + 5 - 2x + 2y + 2$

Answer Key

1. $\text{Poly}\left(-y, x, y, domain = \mathbb{Z}\right)$

2. $\text{Poly}\left(-x + y + 2, x, y, domain = \mathbb{Z}\right)$

3. $\text{Poly}\left(-2y, x, y, domain = \mathbb{Z}\right)$

4. $\text{Poly}\left(3x + 2, x, y, domain = \mathbb{Z}\right)$

5. $\text{Poly}\left(2y, x, y, domain = \mathbb{Z}\right)$

6. $\text{Poly}\left(-2x + 4y, x, y, domain = \mathbb{Z}\right)$

7. $\text{Poly}\left(-x, x, y, domain = \mathbb{Z}\right)$

8. $\text{Poly}\left(x + 2y, x, y, domain = \mathbb{Z}\right)$

9. $\text{Poly}\left(3y + 1, x, y, domain = \mathbb{Z}\right)$

10. $\text{Poly}\left(-x + 2y - 1, x, y, domain = \mathbb{Z}\right)$

11. $\text{Poly}\left(-4x + 4y + 3, x, y, domain = \mathbb{Z}\right)$

12. $\text{Poly}\left(2x + y + 1, x, y, domain = \mathbb{Z}\right)$

13. $\text{Poly}\left(-2x + y - 2, x, y, domain = \mathbb{Z}\right)$

14. $\text{Poly}\left(-4x + 2, x, y, domain = \mathbb{Z}\right)$

15. $\text{Poly}\left(x + 4y - 1, x, y, domain = \mathbb{Z}\right)$

16. $\text{Poly}\left(x + 2y + 2, x, y, domain = \mathbb{Z}\right)$

17. $\text{Poly}\left(2x + 1, x, y, domain = \mathbb{Z}\right)$

18. $\text{Poly}\left(2y + 2, x, y, domain = \mathbb{Z}\right)$

19. $\text{Poly}\left(2x + 3y - 1, x, y, domain = \mathbb{Z}\right)$

20. $\text{Poly}\left(2x + 3y + 3, x, y, domain = \mathbb{Z}\right)$