Routine Expanding Practice #2

Expand and simplify:

1. $3(x + 2)$

2. $-3(k + 2)$

3. $-2(y - 5)$

4. $3(y - 4)$

5. $3(x + 5)$

6. $x(x + 1) + 2(5 + x)$

7. $5(y - 3) + 2(y - 2)$

8. $5(k + 1) + 4(5 + k)$

9. $2(x + 3) - 3(x - 2)$

10. $2(x - 1) - 6(x + 5)$

11. $(x + 1)(x + 7)$

12. $(x + 2)(x + 4)$

13. $(x - 2)(x + 3)$

14. $(x + 6)(x - 8)$

15. $(x - 1)(x - 3)$

16. $(x - 2)(x + 2)$

17. $(x - 5)^2$

18. $(x - 5)(x - 7)$

19. $(x + 3)(x - 3)$

20. $(x + 6)(k + 3)$

Answers: Routine Expanding Practice #2

Expand and simplify:

1.	$3(x + 2)$	$= 3x + 6$	
2.	$-3(k + 2)$	$= -3k - 6$	
3.	$-2(y - 5)$	$= -2y + 10$	
4.	$3(y - 4)$	$= 3y - 12$	
5.	$3(x + 5)$	$= 3x + 15$	
6.	$x(x + 1) + 2(5 + x)$	$= x^2 + 1x + 10 + 2x$	$= x^2 + 3x + 10$
7.	$5(y - 3) + 2(y - 2)$	$= 5y - 15 + 2y - 4$	$= 7y - 19$
8.	$5(k + 1) + 4(5 + k)$	$= 5k + 5 + 20 + 4k$	$= 9k + 25$
9.	$2(x + 3) - 3(x - 2)$	$= 2x + 6 - 3x + 6$	$= -x + 12$
10.	$2(x - 1) - 6(x + 5)$	$= 2x - 2 - 6x - 30$	$= -4x - 32$
11.	$(x + 1)(x + 7)$	$= x^2 + 7x + 1x + 7$	$= x^2 + 8x + 7$
12.	$(x + 2)(x + 4)$	$= x^2 + 4x + 2x + 8$	$= x^2 + 6x + 8$
13.	$(x - 2)(x + 3)$	$= x^2 + 3x - 2x - 6$	$= x^2 + x - 6$
14.	$(x + 6)(x - 8)$	$= x^2 - 8x + 6x - 48$	$= x^2 - 2x - 46$
15.	$(x - 1)(x - 3)$	$= x^2 - 3x - 1x + 3$	$= x^2 - 4x + 3$
16.	$(x - 2)(x + 2)$	$= x^2 + 2x - 2x - 4$	$= x^2 - 4$
17.	$(x - 5)^2 = (x - 5)(x - 5)$	$= x^2 - 5x - 5x + 25$	$= x^2 - 10x + 25$
18.	$(x - 5)(x - 7)$	$= x^2 - 7x - 5x + 35$	$= x^2 - 12x + 35$
19.	$(x + 3)(x - 3)$	$= x^2 - 3x + 3x - 9$	$= x^2 - 9$
20.	$(x + 6)(k + 3)$		$= xk + 3x + 6k + 18$

Minuses can be written as plus the negative (e.g. $3x - 5 = 3x + -5$).
Answers can be in any order, so long as the – signs are correct.