

2.4 PRACTICE

(If you start with a fraction, end with a fraction. If you start with a decimal, end with a decimal)

Simplify the expression by combining like terms.		
1. $6y - 8 + 2y + 5$ $6y + 2y - 8 + 5$ $8y - 3$	2. $9 - 5a + 2 + a$ $-5a + 1a + 9 + 2$ $-4a + 11$	3. $6r + 2r + 4 - 5r + 1$ $6r + 2r - 5r + 4 + 1$ $3r + 5$
4. $3m + 2n + 5m - 10 + 7n$ $3m + 5m + 2n + 7n - 10$ $8m + 9n - 10$	5. $7 + 5w - 4 + 3w + 2$ $5w + 3w + 7 - 4 + 2$ $8w + 3 + 2$ $8w + 5$	6. $5 - 2.1s + 17s$ $5 + 14.9s$
7. $\frac{1}{2}h + 5 + \frac{5}{2}h - 3$ $\frac{1}{2}h + \frac{5}{2}h + 5 - 3$ $\frac{6}{2}h + 2$ $3h + 2$	8. $\frac{2}{3} + 4n - 9 - 2n$ $4n - 2n + \frac{2}{3} - 9$ $2n + \frac{2}{3} - \frac{27}{3}$ $2n - \frac{25}{3}$	

Simplify the expression by using the distributive property.		
9. $4(x + 3)$ $4x + 12$	10. $5(m + 5)$ $5m + 25$	11. $-8(p - 3)$ $-8p + 24$
12. $(2r - 3)(2)$ $4r - 6$	13. $6.5(v + 1)$ $6.5v + 6.5$	14. $-2(3 + x)$ $-6 - 2x$
15. $\frac{1}{2}(\frac{1}{2}m - 4)$ $\frac{1}{2}(\frac{1}{2}m) - \frac{1}{2}(4)$ $\frac{1}{4}m - \frac{1}{2}(\frac{4}{1})$ $\frac{1}{4}m - 2$	16. $\frac{2}{3}(6n - 9)$ $\frac{2}{3}(6n) - \frac{2}{3}(9)$ $\frac{2}{3}(\frac{6}{1}n) - \frac{2}{3}(\frac{9}{1})$ $\frac{12}{3}n - \frac{18}{3}$ $4n - 6$	

Simplify the expression using distributive property and combine like terms.

17. $6y + 2(y+1)$
 $6y + 2y + 2$
 $8y + 2$

18. $2(4a-1) + a$
 $8a - 2 + 1a$
 $8a + 1a - 2$
 $9a - 2$

19. $6r - 2(r+4)$
 $6r - 2r - 8$
 $4r - 8$

20. $3(m+5) - 10$
 $3m + 15 - 10$
 $3m + 5$

21. $7.2(w-5) + 3w$
 $7.2w - 36 + 3w$
 $7.2w + 3w - 36$
 $10.2w - 36$

22. $(s-3)(2) + 17s$
 $2s - 6 + 17s$
 $2s + 17s - 6$
 $19s - 6$

23. $\frac{1}{3}(2m+6) - 10$
 $\frac{2}{3}m + 2 - 10$
 $\frac{2}{3}m - 8$

24. $\frac{1}{2} + 3(2u + \frac{1}{6})$
 $\frac{1}{2} + 6u + \frac{1}{2}$
 $\frac{1}{2} + 6u + \frac{1}{2}$
 $\frac{1}{2} + \frac{1}{2} + 6u = 1 + 6u$
 or $6u + 1$

Mr. Brust tried to simplify the following but a made a really common mistake in each problem. Help a math teacher out by first identifying the mistake, then show the correct solution.

25. $8 + 2(3p+1)$
 $10(3p+1)$
 $30p+10$
 He added the 8 and 2 to make 10 first. This is wrong! Order of operations says you must multiply first so he should have distributed the 2.

$8 + 2(3p+1)$
 $8 + 6p + 2$
 $6p + 8 + 2$
 $6p + 10$

26. $3d - 2(d-4)$
 $3d - 2d - 8$
 $1d - 8$
 He messed up the distributive property. He distributed the 2 but should have distributed negative 2

$3d - 2(d-4)$
 $3d - 2d + 8$
 $1d + 8$