

3.1 Algebraic Expressions (pp. 163-172)
 Learning Target: Simplify algebraic expressions.

Identify the terms and like terms in the expression.

1. $z + 8 - 4z$
 terms: $z, 8, -4z$
 like terms: z and $-4z$
2. $3n + 7 - n - 3$
 terms: $3n, 7, -n, -3$
 like terms: $3n$ and $-n$
 7 and -3
3. ~~$10x^2 - y + 12 - 3x^2$~~

Simplify the expression.

4. $4h - 8h$
 $-4h$
5. $6.4r - 7 - 2.9r$
 $3.5r - 7$
6. $2m - m - 7m$
 $-6m$
7. $6y + 9 + 3y - 7$
 $9y + 2$
8. $\frac{3}{5}x + 19 - \frac{3}{20}x - 7$
 $\frac{9}{20}x + 12$
9. $\frac{2}{3}y + 14 - \frac{1}{6}y - 8$
 $\frac{1}{2}y + 6$

3.2 Adding and Subtracting Linear Expressions (pp. 173-182)
 Learning Target: Find sums and differences of linear expressions.

Find the sum.

13. $(c - 4) + (3c + 9)$
 $4c + 5$
14. $(5z + 4) + (3z - 6)$
 $8z - 2$
15. $(-2.1m - 5) + (3m - 7)$
 $0.9m - 12$
16. $(\frac{5}{4}q + 1) + (q - 4) + (-\frac{1}{4}q + 2)$
 $2q - 1$

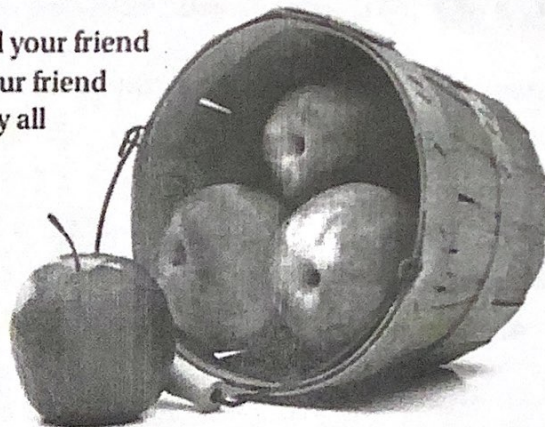
3.1-3.3 QUIZ REVIEW

Name: _____ Date: _____ Period: _____

21. A basket holds n apples. You pick $(2n - 3)$ apples, and your friend picks $(n + 4)$ apples. How many apples do you and your friend pick together? How many baskets do you need to carry all the apples? Justify your answer.

$$(2n - 3) + (n + 4)$$

$$3n + 1$$



3.3

Writing Equivalent Expressions (pp. 183-190)

Learning Target: Apply properties of operations to generate equivalent expressions.

Simplify the expression.

23. $2(a - 3)$

$2a - 6$

24. $-3(4x - 10)$

$-12x + 30$

25. $9(-3w - 6.2 + 2w)$

$-27w - 55.8 + 18w$
 $-9w - 55.8$

26. $3(2 + q) + 15$

$6 + 3q + 15$
 $21 + 3q$

27. $-1.5(4 - n) + 2.8$

$-6 + 1.5n + 2.8$
 $-3.2 + 1.5n$

28. $\frac{2}{5}(d - 10) - \frac{2}{3}(d + 6)$

$\frac{2}{5}d - 4 - \frac{2}{3}d - 4$
 $-\frac{4}{15}d - 8$

Determine whether the expressions are equivalent.

30. $5(2p + 3) - 4$, $10p + 11$

$10p + 15 - 4$
 $10p + 11$ *yes*

31. $6.4 + 1.6(3 - 2.3a)$, $11.2 + 3.68a$

$6.4 + 4.8 - 3.68a$
 $11.2 - 3.68a$ *no*

32. $-\frac{1}{2}(3m + 5) - 4$, $-4 + \frac{3}{2}m - \frac{5}{2}$

$-\frac{3}{2}m - \frac{5}{2} - 4$ *no*

33. $-7 + 1.9(5.2y - 3)$, $9.88y - 5.7 - 7$

$-7 + 9.88y - 5.7$ *yes*