

Lesson 4-2: Generate Equivalent Expressions

1. Sample answer: Expressions that can be generated using properties of operations are equivalent.
2. The Commutative Property is true for addition and multiplication.
3. Sample answer: The Associative Property can be applied to group or ungroup adjacent terms in an expression.

4. Sample answer: $\frac{1}{3}y - 7$

5.

| | | | |
|---|-----|---|-----|
| 1 | -12 | 1 | -12 |
| 2 | -9 | 2 | -9 |
| 3 | -6 | 3 | -6 |

Distributive Property

6. Sample answer: $-\frac{5}{2} + 6x$
7. Sample answer: $-21 - 15g$
8. Sample answer: $x + (7 + 3y)$
9. Sample answer: $-\frac{1}{5}x + \frac{2}{9}$
10. B
11. Sample answer: $-4 + 4d$
12. $w + (9 + 3)$ or $w + 12$
13. Sample answer: $y + z + 29$

14. Sample answer: She did not group like terms correctly. She combined all of the numbers in the expression even though they are not all coefficients of n .

15. Sample answer: $x + 4 + (-3y)$

16. Sample answer: $\frac{4}{3}x - 2$;
 $4x \div 3 + (-2)$

17. a. Sample answers:
 $189 + 224 + p + q$
 $224 + 189 + q + p$

b. Sample answers:
\$40 and \$47
\$50 and \$37

18. B, D