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$4y - 5x \cdot 7 + 3y$	$x + 2x + 3x + 4x$	$3 \cdot 4 - 6y + 2y + x + 2x$
$-, \cdot, +$	$+$	$-, \cdot, +$
y, x	x	x, y
$4y, -5x, 7, 3y$	$x, 2x, 3x, 4x$	$3, 4, -6y, 2y, x, 2x$
$4y$ and $3y$	all	3 and 4 , $-6y$ and $2y$, x and $2x$
$4, -5, 7, 3$	$1, 2, 3, 4$	$3, 4, -6, 2, 1, 2$

Monomials, Binomials, and Trinomials (page 100)

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1. Monomial
2. Trinomial
3. Monomial
4. Monomial
5. Trinomial
6. Binomial
7. Monomial
8. Trinomial
9. Binomial
10. Monomial

Associative and Commutative Properties (page 36)

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\times	2	4	$\frac{1}{2}$	-3	5
$\frac{1}{3}$	$\frac{2}{3}$	$\frac{4}{3}$	$\frac{1}{6}$	-1	$\frac{5}{3}$
6	12	24	3	-18	30
$\frac{3}{5}$	$\frac{6}{5}$	$\frac{12}{5}$	$\frac{3}{10}$	$-\frac{9}{5}$	$\frac{15}{5}$
5	10	20	$\frac{5}{2}$	-15	25
8	16	32	4	-24	40

- 2 \times $\frac{1}{3}$; $\frac{1}{3} \times 2$
- 2 \times 6; 6 \times 2
- 2 \times $\frac{3}{5}$; $\frac{3}{5} \times 2$
- 2 \times 5; 5 \times 2
- 2 \times 8; 8 \times 2
- 4 \times $\frac{1}{3}$; $\frac{1}{3} \times 4$
- 4 \times 6; 6 \times 4
- 4 \times $\frac{3}{5}$; $\frac{3}{5} \times 4$
- 4 \times 5; 5 \times 4
- 4 \times 8; 8 \times 4
- $\frac{1}{2} \times \frac{1}{3}$; $\frac{1}{3} \times \frac{1}{2}$
- $\frac{1}{2} \times 6$; 6 \times $\frac{1}{2}$
- $\frac{1}{2} \times \frac{3}{5}$; $\frac{3}{5} \times \frac{1}{2}$
- $\frac{1}{2} \times 5$; 5 \times $\frac{1}{2}$
- $\frac{1}{2} \times 8$; 8 \times $\frac{1}{2}$
- 3 \times $\frac{1}{3}$; $\frac{1}{3} \times -3$
- 3 \times 6; 6 \times -3
- 3 \times $\frac{3}{5}$; $\frac{3}{5} \times -3$
- 3 \times 5; 5 \times -3
- 3 \times 8; 8 \times -3
- 5 \times $\frac{1}{3}$; $\frac{1}{3} \times 5$
- 5 \times 6; 6 \times 5
- 5 \times $\frac{3}{5}$; $\frac{3}{5} \times 5$
- 5 \times 5; 5 \times 5
- 5 \times 8; 8 \times 5
1. 48
2. 19
3. 60
4. 23
5. 42
6. 60
7. 42
8. 109
9. 44
10. 60
11. 969
12. 48
13. 379
14. 108

Associative and Commutative Properties (page 96)

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1. Commutative Property of Addition
2. Associative Property of Addition
3. Disprove; Example: $3 - 2 = 1 \neq 2 - 3 = -1$
4. Disprove; Example: $(4 - 3) - 2 = -1 \neq 4 - (3 - 2) = 3$
5. Commutative Property of Multiplication
6. Associative Property of Multiplication
7. Disprove; Example: $49 \div 7 = 7 \neq 7 \div 49 = 1/7$
8. Disprove; Example: $(10 \div 5) \div 2 = 1 \neq 10 \div (5 \div 2) = 4$

Investigation (page 79)

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Models will vary.

1. $6x + 9y + 7$
2. $7x + 5y + 10$
3. $12x + 10y$
4. $7x + 5y + 10$
5. $12x + 6y + 12$
6. $30x^2 + 27$
7. $-16x + 10y + 29$
8. $20x^2 + 40y^2$

Adding Like Terms (page 81)

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1. $5a$
2. $8y + 3$
3. $3p + 8z + 5$
4. $13r + 6$
5. $14x$
6. $18b$
7. $11x + 7y$
8. $30x + 16y + 13$
9. $44a + 23$
10. $31x + 41y + 6$
11. $26x + 26y + 14z$
12. $82x + 77y + 55z$
13. $24x + 35y + 27z + 30$
14. $33x + 30y + 15z + 12$

Simplify It! (page 92)

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1. $13y$
2. $7a$
3. $4x$
4. $-2a + 2b$
5. $7x + 4y$
6. $26x - y - 11$
7. $f + 5z + 6$
8. $5x + 5y$
9. $6a + 13$
10. $22x - 7y + 31z$
11. $12x + 9y$
12. $-4a + 8$

Distribute It! (page 80)

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- | | |
|----------------------|--------------------|
| 1. 1,190 | 2. $5x + 20$ |
| 3. $6x + 6y$ | 4. $5x + 5y + 500$ |
| 5. $30x + 10z + 120$ | 6. $12a + 9b$ |
| 7. $2a + b$ | 8. $8x$ |
| 9. $8x + 3$ | 10. $10x + 5$ |

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Distributive Property (page 37)

- | | |
|---------|----------|
| 1. 21 | 15. -60 |
| 2. -32 | 16. 80 |
| 3. 22 | 17. 135 |
| 4. 10 | 18. 378 |
| 5. 56 | 19. 64 |
| 6. 45 | 20. 486 |
| 7. -32 | 21. 56 |
| 8. 33 | 22. 54 |
| 9. 28 | 23. -144 |
| 10. 207 | 24. 45 |
| 11. 50 | 25. 48 |
| 12. 72 | 26. 108 |
| 13. 75 | 27. 10 |
| 14. 96 | |

Order of Operations (page 38)

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- | | |
|--------|--------|
| 1. 19 | 8. 61 |
| 2. 4 | 9. 50 |
| 3. 64 | 10. 7 |
| 4. 5 | 11. 4 |
| 5. 8 | 12. 56 |
| 6. 8 | 13. 3 |
| 7. 125 | 14. 12 |