

# Math Connections



## Math Course 1—Week 2 Answers

### Distributive Property 2.3.3 Answers

#### Answers

- |   |   |                   |                     |
|---|---|-------------------|---------------------|
| 1. $(6 \cdot 9) + (6 \cdot 4) = 54 + 24 = 78$ | 2. $(4 \cdot 9) + (4 \cdot 8) = 36 + 32 = 68$ |                   |                     |
| 3. $56 + 42 = 98$                             | 4. $35 + 20 = 55$                             | 5. $60 + 21 = 81$ | 6. $240 + 36 = 276$ |
| 7. $320 + 24 = 344$                           | 8. $420 + 48 = 468$                           | 9. $3x + 18$      | 10. $5x + 35$       |
| 11. $8x - 32$                                 | 12. $6x - 60$                                 | 13. $4x + 32$     | 14. $5x + 10$       |
| 15. $-7x - 7$                                 | 16. $-4y - 12$                                | 17. $-3y + 15$    | 18. $-5b + 20$      |
| 19. $-x - 6$                                  | 20. $-x - 7$                                  | 21. $-x + 4$      | 22. $x + 3$         |
| 23. $x^2 + 3x$                                | 24. $4x^2 + 8x$                               | 25. $-5x^2 + 7x$  | 26. $-2x^2 + 6x$    |

### Distributive Property 2.3.4 Answers

#### Answers

- |                |                 |                    |                |
|----------------|-----------------|--------------------|----------------|
| 1. $6(x+2)$    | 2. $5(y-2)$     | 3. $4(2x+5z)$      | 4. $x(x+y)$    |
| 5. $8(m+3)$    | 6. $8(2y+5)$    | 7. $4(2m-1)$       | 8. $5(5y-2)$   |
| 9. $2x(x-5)$   | 10. $21(x^2-3)$ | 11. $21x(x-3)$     | 12. $5(3y+7)$  |
| 13. $4(x+y+z)$ | 14. $6(x+2y+1)$ | 15. $7(2x^2-7x+4)$ | 16. $x(x-1+y)$ |

## Equivalent Fractions 3.1.1 Answers

### Answers

1.  $\frac{5}{5}, 20$    2.  $\frac{4}{4}, 20$    3.  $\frac{19}{19}, 171$    4.  $\frac{4}{4}, 12$    5.  $\frac{6}{6}, 30$    6.  $\frac{3}{3}, 18$

## Fraction Decimal Percent Equivalents 3.1.2-3.1.5 Answers

### Answers

1. 0.25      2.  $\frac{1}{2}$       3.  $\frac{3}{4}$       4. 0.75  
5. 38%      6. 20%      7.  $\frac{3}{10}$       8. 0.125  
9.  $0.\overline{33}$       10. 8%      11. 0.87      12. 60%  
13.  $\frac{2}{5}$       14.  $\frac{13}{20}$       15.  $0.\overline{11}$       16.  $\frac{5}{4}$  or  $1\frac{1}{4}$   
17. 1.6      18. 325%      19. 0.0625; 6.25%      20.  $0.\overline{142859}$   
21.  $\frac{43}{100}$ ; 0.43      22.  $37\frac{1}{2}\%$ ;  $\frac{3}{8}$       23. 0.875; 87.5%  
24.  $\frac{12}{99} = \frac{4}{33}$       25.  $\frac{175}{999}$

## Operations with Fractions 3.1.2 Answers

### Answers

1.  $\frac{19}{20}$        2.  $\frac{13}{21}$        3.  $\frac{17}{12} = 1\frac{5}{12}$  

## Ratios 3.1.6 Answers

### Answers

1. a.  $\frac{5}{3}$    b.  $\frac{2}{3}$    c.  $\frac{2}{10} = \frac{1}{5}$       2. a.  $\frac{20}{16} = \frac{5}{4}$    b.  $\frac{16}{20} = \frac{4}{5}$    c.  $\frac{2}{36}$    d.  $\frac{2}{38}$   
3. 9 c. apple, 15 c. cranberry, 6 c. ginger ale      4.  $7\frac{1}{2}$  c. apple,  $12\frac{1}{2}$  c. cranberry, 5 c. ginger ale

## Operations with Integers 3.2.1 and 3.2.2 Answers

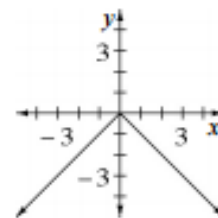
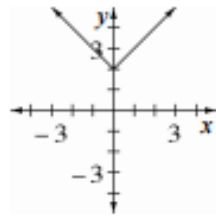
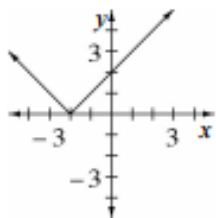
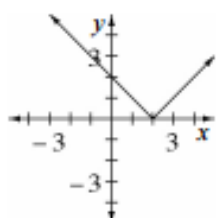
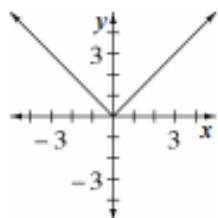
### Answers

- |        |         |         |         |        |         |
|--------|---------|---------|---------|--------|---------|
| 1. 2   | 2. 5    | 3. 0    | 4. -4   | 5. -6  | 6. -5   |
| 7. -13 | 8. -12  | 9. -27  | 10. 2   | 11. 8  | 12. -14 |
| 13. 7  | 14. 73  | 15. -6  | 16. -69 | 17. 37 | 18. 161 |
| 19. 60 | 20. 0   | 21. -8  | 22. -2  | 23. 0  | 24. -50 |
| 25. -2 | 26. -39 | 27. -15 | 28. 1   | 29. 10 | 30. 21  |

## Absolute Value 3.2.3 Answers

### Answers

- |            |       |                |            |            |
|------------|-------|----------------|------------|------------|
| 1. 11      | 2. 12 | 3. 4, -4       | 4. 16, -16 | 5. 24, -24 |
| 6. 13, -13 | 7. 9  | 8. no solution | 9. 13, -13 | 10. -7     |
| 11. 7, -7  | 12. 7 | 13. 3          | 14. 9      | 15. 3      |
| 16.        | 17.   | 18.            | 19.        | 20.        |



## Four Quadrant Graphing 3.2.4 Answers

### Answers

1.  $S(2, 2)$   
 $T(-1, -6)$   
 $U(0, 6)$   
 $V(1, -4)$   
 $W(-6, 0)$   
 $Z(-5, 3)$

2.

