Consortium for Worker Education

IBEW Local 3 Variable Swap Practice Problems #1

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Solve for the Unknown

Isolate x, in terms of y

1. $y = 2x$
2. $y = -3x$
3. $y = 9x$
4. $y = \frac{1}{4}\, x$
5. $y = -\, x/12$
6. $y = 15x$
7. $y = \frac{3}{4}\, x$
8. $y = -5x/8$
9. $y = 7x/12$
10. $y = 3x/10$
11. $y = x - 3$
12. $y = x + 4$
13. $y = x - 6$
14. $y = 4 - x$
15. $y = -6 + x$
16. $y = -\, x + 5$
17. $y = -10 - x$
18. $y = -12 + x$
19. $y = -\, x + 18$
20. $y = x - 16$

Solve for the Unknown

Isolate x, in terms of y

1. $y = 2x + 4$
2. $y = -3x + 9$
3. $y = 9x - 27$
4. $y = \frac{1}{4}x + 5$
5. $y = -x/12 - 3$
6. $y = 15x - 45$
7. $y = \frac{3}{4}x + 12$
8. $y = 20 - 5x/8$
9. $y = 5x/12 - 20$
10. $y = -3x/8 + 24$
11. $y = 2x - 6$
12. $y = 5x + 40$
13. $y = 9x - 63$
14. $y = 6 - \frac{3}{4}x$
15. $y = -6 + \frac{1}{2}x$
16. $y = -2x/3 + 8$
17. $y = -10 - \frac{1}{4}x$
18. $y = -12 + 3x/5$
19. $y = -2x/3 + 18$
20. $y = -16 - x/7$

Solve for the Unknown

Isolate x, in terms of y

1. $y = \frac{1}{x}$

2. $y = \frac{-3}{x}$

3. $y = \frac{1}{4x}$

4. $y = \frac{2}{-3x}$

5. $y = \frac{5}{8x} + 6$

6. $y = \frac{-3}{5x} - 7$

7. $y = -4 + \frac{2}{3x}$

8. $y = 6 - \frac{4}{9x}$

9. $y = -12 - \frac{5}{8x}$

10. $y = 15 - \frac{3}{7x}$

11. $y = \frac{1}{x + 3}$

12. $y = \frac{-3}{x + 7}$

13. $y = \frac{3}{x - 4}$

14. $y = \frac{2}{4x + 4}$

15. $y = \frac{6}{3x + 12}$

16. $y = \frac{-3}{-6x + 24}$

17. $y = \frac{2}{x - 1} + 4$

18. $y = \frac{-3}{x + 5} - 7$

19. $y = \frac{6}{2x - 3} + 4$

20. $y = 4 + \frac{-2}{4x + 8}$

Solve for the Unknown

Isolate x, in terms of y

1. $y = 4x$
2. $y = -5x$
3. $y = 7x$
4. $y = \frac{1}{2}x$
5. $y = -x/8$
6. $y = 12x$
7. $y = \frac{3}{4}x$
8. $y = -3x/10$
9. $y = 5x/8$
10. $y = 4x/9$
11. $y = x - 6$
12. $y = x + 6$
13. $y = x - 9$
14. $y = 6 - x$
15. $y = -5 + x$
16. $y = -x + 4$
17. $y = -14 - x$
18. $y = -15 + x$
19. $y = -x + 16$
20. $y = x - 18$

Solve for the Unknown

Isolate x, in terms of y

1. $y = 4x + 8$
2. $y = -5x + 15$
3. $y = 7x - 21$
4. $y = \frac{1}{4}x + 7$
5. $y = -x/7 - 4$
6. $y = 12x - 48$
7. $y = \frac{3}{4}x + 9$
8. $y = 12 - 3x/8$
9. $y = 7x/12 - 21$
10. $y = -5x/8 + 25$
11. $y = 3x - 6$
12. $y = 11x + 132$
13. $y = 8x - 56$
14. $y = 12 - \frac{3}{4}x$
15. $y = -7 + \frac{1}{2}x$
16. $y = -3x/4 + 18$
17. $y = -13 - \frac{1}{4}x$
18. $y = -12 + 4x/5$
19. $y = -4x/5 + 24$
20. $y = -16 - x/7$

Solve for the Unknown

Isolate x, in terms of y

1. $y = \frac{2}{x}$

2. $y = \frac{-5}{x}$

3. $y = \frac{1}{3x}$

4. $y = \frac{3}{-4x}$

5. $y = \frac{4}{9x} + 12$

6. $y = \frac{-3}{7x} - 11$

7. $y = -4 + \frac{5}{6x}$

8. $y = 8 - \frac{6}{7x}$

9. $y = -13 - \frac{3}{5x}$

10. $y = 11 - \frac{4}{9x}$

11. $y = \frac{1}{x + 4}$

12. $y = \frac{-2}{x + 9}$

13. $y = \frac{4}{x - 6}$

14. $y = \frac{3}{5x + 5}$

15. $y = \frac{7}{2x + 9}$

16. $y = \frac{-5}{-3x + 7}$

17. $y = \frac{4}{x - 3} + 2$

18. $y = \frac{-2}{x + 5} - 3$

19. $y = \frac{7}{3x - 2} + 5$

20. $y = 5 + \frac{-3}{3x + 6}$

Replace In/dependent Variables

Isolate x, in terms of y

1. $y = 2 - 1 / (x + 3)$

2. $y = 12 + (x - 1) / 4$

3. $y = 9 - 3(x - 3) / 4$

4. $y = 6 + 1 / (3x - 6)$

5. $y = 10 + 2(x + 3)$

6. $y = -8 - (x + 2)/3$

7. $y = - ½ + ¾ x$

8. $y = 4 - (x + 4) / 3$

Variables

Isolate the variable on the right side of the equation

1. $g = 7 + \frac{-4}{3h + 6}$

2. $p = -8 + \frac{2(q - 3)}{2}$

3. $j = \frac{-4k}{5} + 8$

4. $m = 2 + \frac{1}{8(n - 2)}$

Variables

Isolate the variable on the right side of the equation

1. $a = -2 + \frac{6b}{3}$

2. $c = -12 + \frac{d-3}{5}$

3. $e = \frac{1}{8(f-2)} - 2$

4. $q = -14 + \frac{2r}{3}$

5. $j = 6 - 2(k - 15)$

6. $y = -12 + 3(z - 9)$

Inverse Functions

Isolate x, in terms of y

1. $y = -\dfrac{5}{\sqrt{2x+1}} + 10$

2. $y = \dfrac{3}{4(x+3)^2} - 15$

3. $y = 12 - 3\sqrt{2x+5}$

4. $y = 2 - \dfrac{(x-3)^2}{8}$

5. $y = \dfrac{2}{\sqrt{3x}+1} - 10$

5. $c = 6 - 2(d + 10)$

6. $e = 18 - 4(f - 12)$