

A.A.22: Solve all types of linear equations in one variable.

1. 060810a, P.I. A.A.22

What is the value of x in the equation $5 - 3x = -7$?

[A] 4 [B] $-\frac{2}{3}$ [C] $\frac{2}{3}$ [D] -4

2. 060214a, P.I. A.A.22

What is the solution of the equation $3y - 5y + 10 = 36$?

[A] 13 [B] 4.5 [C] -13 [D] 2

3. 080015a, P.I. A.A.22

Solve for x : $15x - 3(3x + 4) = 6$

[A] 1 [B] $\frac{1}{3}$ [C] $-\frac{1}{2}$ [D] 3

4. 080812a, P.I. A.A.22

What is the value of m in the equation $2m - (m + 1) = 0$?

[A] $\frac{1}{3}$ [B] -1 [C] 0 [D] 1

5. 080602a, P.I. A.A.22

What is the value of p in the equation $2(3p - 4) = 10$?

[A] 3 [B] 1 [C] $2\frac{1}{3}$ [D] $\frac{1}{3}$

6. 010904a, P.I. A.A.22

What is the value of x in the equation $2(x - 3) + 1 = 19$?

[A] 10.5 [B] 12 [C] 9 [D] 6

7. 060813a, P.I. A.A.22

If $3(x + 2) - 2(x + 1) = 8$, the value of x is

[A] 5 [B] 1 [C] 4 [D] $\frac{1}{5}$

8. 060404a, P.I. A.A.22

If $3(x - 2) = 2x + 6$, the value of x is

[A] 12 [B] 20 [C] 0 [D] 5

9. 010401a, P.I. A.A.22

If $2(x + 3) = x + 10$, then x equals

[A] 14 [B] 5 [C] 7 [D] 4

10. 010705a, P.I. A.A.22

What is the value of n in the equation $3n - 8 = 32 - n$?

[A] -10 [B] -6 [C] 6 [D] 10

11. 010807a, P.I. A.A.22

What is the value of p in the equation $8p + 2 = 4p - 10$?

[A] -3 [B] 1 [C] -1 [D] 3

12. 080801ia, P.I. A.A.22

Which value of p is the solution of
 $5p - 1 = 2p + 20$?

[A] 3 [B] $\frac{19}{3}$ [C] 7 [D] $\frac{19}{7}$

13. 010601a, P.I. A.A.22

What is the value of x in the equation
 $5(2x - 7) = 15x - 10$?

[A] 1 [B] -9 [C] 0.6 [D] -5

14. 060702a, P.I. A.A.22

What is the value of x in the equation
 $6(x - 2) = 36 - 10x$?

[A] 1.5 [B] 3 [C] 6 [D] -6

15. 060602a, P.I. A.A.22

What is the value of x in the equation
 $13x - 2(x + 4) = 8x + 1$?

[A] 4 [B] 1 [C] 3 [D] 2

16. 010908a, P.I. A.A.22

What is the solution for the equation
 $x + 1 = x + 2$?

[A] -1 [B] all real numbers
[C] $\frac{1}{2}$ [D] There is no solution.

17. fall0732ia, P.I. A.A.22

Solve for g : $3 + 2g = 5g - 9$

18. 080731a, P.I. A.A.22

Solve for x : $5(x - 2) = 2(10 + x)$

19. 080219a, P.I. A.A.22

If $2x + 5 = -25$ and $-3m - 6 = 48$, what is the product of x and m ?

[A] 270 [B] -33 [C] 3 [D] -270

20. 060519a, P.I. A.A.22

If $-2x + 3 = 7$ and $3x + 1 = 5 + y$, the value of y is

[A] -10 [B] 1 [C] 0 [D] 10

A.A.22: Solve all types of linear equations in one variable.

[1] A

[2] C

[3] D

[4] D

[5] A

[6] B

[7] C

[8] A

[9] D

[10] D

[11] A

[12] C

[13] D

[14] B

[15] C

[16] D

[2] 4, and appropriate work is shown.

[1] Appropriate work is shown, but one computational error is made.

or [1] Appropriate work is shown, but one conceptual error is made.

or [1] 4, but no work is shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[17] incorrect procedure.

[2] 10, and appropriate work is shown, such as solving the equation or trial and error with at least three trials and appropriate checks.

[1] Appropriate work is shown, but one computational error is made.

or [1] Appropriate work is shown, but one conceptual error is made.

or [1] The trial-and-error method is attempted and at least six systematic trials and appropriate checks are shown, but no solution is found.

or [1] 10, but no work or fewer than three trials and appropriate checks are shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[18] incorrect procedure.

[19] A

[20] A