

A.REI.B.3: Solving Linear Equations 3a

- 1 If $0.02x + 0.7 = 0.8$, then x is equal to
 - 1) 0.5
 - 2) 2
 - 3) 5
 - 4) 50

- 2 What is the value of w in the equation $0.04w + 0.6 = 2.4$?
 - 1) 0.045
 - 2) 0.45
 - 3) 4.5
 - 4) 45

- 3 What is the value of n in the equation $0.6(n + 10) = 3.6$?
 - 1) -0.4
 - 2) 5
 - 3) -4
 - 4) 4

- 4 What is the value of n in the equation $0.2(n - 6) = 2.8$?
 - 1) 8
 - 2) 2
 - 3) 20
 - 4) 44

- 5 The value of y in the equation $0.06y + 200 = 0.03y + 350$ is
 - 1) 500
 - 2) $1,666.\bar{6}$
 - 3) 5,000
 - 4) $18,333.\bar{3}$

- 6 An equation is given below.
$$4(x - 7) = 0.3(x + 2) + 2.11$$
The solution to the equation is
 - 1) 8.3
 - 2) 8.7
 - 3) 3
 - 4) -3

- 7 Solve for m : $0.6m + 3 = 2m + 0.2$

- 8 Solve for x : $0.35x + 0.6 = 0.1x + 1$

- 9 Solve for x : $2(x - 3) = 1.2 - x$

- 10 Solve for x : $3.3 - x = 3(x - 1.7)$

- 11 A candy store sells 8-pound bags of mixed hazelnuts and cashews. If c pounds of cashews are in a bag, the price p of the bag can be found using the formula $p = 2.59c + 1.72(8 - c)$. If one bag is priced at \$18.11, how many pounds of cashews does it contain?

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Answer Section

1 ANS: 3

$$0.02x + 0.7 = 0.8$$

$$0.02x = 0.1$$

$$x = \frac{0.1}{0.02}$$

$$x = 5$$

REF: 010906a

2 ANS: 4

$$0.04w + 0.6 = 2.4$$

$$0.04w = 1.8$$

$$w = 45$$

REF: 060804a

3 ANS: 3

$$0.6(z + 10) = 3.6$$

$$.6z + 6 = 3.6$$

$$.6z = -2.4$$

$$z = -4$$

REF: 080406a

4 ANS: 3

$$0.2(n - 6) = 2.8$$

$$n - 6 = 14$$

$$n = 20$$

REF: 011502ia

5 ANS: 3

$$0.06y + 200 = 0.03y + 350$$

$$0.03y = 150$$

$$y = 5,000$$

REF: 081203ia

6 ANS: 1

$$4(x - 7) = 0.3(x + 2) + 2.11$$

$$4x - 28 = 0.3x + 0.6 + 2.11$$

$$3.7x - 28 = 2.71$$

$$3.7x = 30.71$$

$$x = 8.3$$

REF: 061719ai

7 ANS:

$$0.6m + 3 = 2m + 0.2$$

$$2. \quad 2.8 = 1.4m$$

$$m = 2$$

REF: 060323a

8 ANS:

$$0.35x + 0.6 = 0.1x + 1$$

$$1.6. \quad 0.25x = 0.4$$

$$x = 1.6$$

REF: 080831a

9 ANS:

$$2(x - 3) = 1.2 - x$$

$$2.4. \quad 2x - 6 = 1.2 - x$$

$$3x = 7.2$$

$$x = 2.4$$

REF: 089921a

10 ANS:

$$3.3 - x = 3(x - 17)$$

$$2.1. \quad 3.3 - x = 3x - 5.1$$

$$8.4 = 4x$$

$$x = 2.1$$

REF: 060634a

11 ANS:

$$p = 2.59c + 1.72(8 - c)$$

$$5. \quad 18.11 = 2.59c + 13.76 - 1.72c$$

$$4.35 = .87c$$

$$c = 5$$

REF: 010635a