

EXPRESSIONS AND EQUATIONS: Solving Equations with Decimals

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NAME: _____

1. 060804a, P.I. A.A.25

What is the value of w in the equation
 $0.04w + 0.6 = 2.4$?

[A] 4.5 [B] 45 [C] 0.045 [D] 0.45

2. 010906a, P.I. A.A.25

If $0.02x + 0.7 = 0.8$, then x is equal to

[A] 50 [B] 5 [C] 0.5 [D] 2

3. 080406a, P.I. A.A.25

What is the value of n in the equation
 $0.6(n + 10) = 3.6$?

[A] 5 [B] 4 [C] -0.4 [D] -4

4. 060323a, P.I. A.A.25

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

5. 080831a, P.I. A.A.25

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

6. 089921a, P.I. A.A.25

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

7. 060634a, P.I. A.A.25

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

8. 010635a, P.I. A.A.25

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?

[1] B _____

[2] B _____

[3] D _____

[2] 2, and appropriate work is shown.

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

or [1] 2, 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

[4] incorrect procedure.

[2] 1.6, 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] 1.6, 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

[5] incorrect procedure.

[2] 2.4 and appropriate work is shown.

[1] The student shows correct use of the distributive property to obtain $2x - 6$ or other appropriate algebraic technique.

or [1] 2.4 and 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

[6] incorrect procedure.

[2] 2.1, 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] 2.1, 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

[7] incorrect procedure.

[2] 5 and appropriate work is shown, such as substituting \$18.11 for p and solving the equation correctly, 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] 5, but no work or fewer than three trials with 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

[8] incorrect procedure.