

A.CED.A.1: Modeling Linear Equations 1

Answer Section

1 ANS: 2 REF: 061914ai

2 ANS: 3 REF: 081616ai

3 ANS: 3 REF: 081614ai

4 ANS: 2 REF: 061416ai

5 ANS: 1 REF: 062213ai

6 ANS: 2 REF: 082404ai

7 ANS:

$$15x + 36 = 10x + 48$$

$$5x = 12$$

$$x = 2.4$$

REF: 011531ai

8 ANS:

$$12x + 9(2x) + 5(3x) = 15 \cdot 6 \left(\frac{1}{3} \right) = 2 \text{ pounds}$$

$$45x = 15$$

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

REF: spr1305ai

9 ANS:

$$1.25x + 0.55(x + 4) + 0.75(x - 2) = 16 \quad 1.25x + 0.55x + 2.2 + 0.75x - 1.5 = 16$$

$$2.55x + 0.7 = 16$$

$$2.55x = 15.3$$

$$x = 6$$

REF: 062134ai

10 ANS:

$$1000 - 60x = 600 - 20x. \quad 1000 - 60(10) = 400. \quad \text{Ian is incorrect because } I = 1000 - 6(16) = 40 \neq 0$$

$$40x = 400$$

$$x = 10$$

REF: 011737ai