

Key

- 1) How many solutions? One Solution, No Solution, or Infinitely Many Solutions.

$$-2(3x - 1) = -6x - 1 \quad \underline{\text{No Solution}}$$

$$2(3x - 1) = 6x - 2 \quad \underline{\text{IMS}}$$

$$2(3x - 1) = -6x - 2 \quad \underline{\text{one solution}}$$

Solve each equation.

$$2) -2(8n + 6) = 116$$

**-8**

$$3) 6(x + 8) = 90$$

**7**

$$4) -3 + 1 - n + 3n = n - 10$$

**-8**

$$5) x + 6 = -10 - x$$

**-8**

$$6) 6p + 5.8 = 4.5p - 9.2 \quad -10$$

$$7) 1.6k + 1.9k = 4.55 \quad 1.3$$

$$8) 5.4x + 4.7x = -2.02 \quad -0.2$$

$$9) -10(r + 5) = -120 \quad 7$$

$$10) 469 = -6x - 7(9 + 10x) \quad -7$$

$$11) 4(3x + 7) = 136 \quad 8 \quad 9$$

12) Edy has \$450 in her savings account. She deposits \$40 each month. Juan has \$975 in his checking account. He writes a check for \$45.45 each month for his cell phone bill. He also writes a check for \$19.55 each month for his water bill. After how many months will Edy and Juan have the same amount of money in their accounts?

$$450 + 40m = 45.45m - 19.55m + 975$$

13) A music shop charges a deposit of \$20, plus a monthly rate of \$30 to rent an instrument. For how many months did Avi rent an instrument if he spent a total of \$80?

$$20 + 30m = 80$$