

TOPIC 1: Review solving Equations (including VOB)

Solve the following equations. Show all algebraic work.

Review Example: 1

$$4x + 3 = 5x + 7$$

Review Example: 2

$$\frac{x-3}{x} = \frac{9}{10}$$

ON YOUR OWN: Solve for the variable.

1.

$$18 + 2n = 4n - 9$$

2.

$$\frac{g-1}{3} = 12$$

Review Example: 3

$$3(x - 2) = 4x + 5$$

TRY IT**3**

$$-6(4x + 1) = 7 - 11x$$

4

$$10 - 2.7y = -0.7y + 9$$

5

$$\frac{1}{2}y = \frac{1}{3}y + 2$$

6.

$$\frac{-7+2n}{7} = -11$$

Challenge:

$$\frac{5}{r-9} = \frac{8}{r+5}$$

Problem Set 1: Review Solving Equations (Including VOB)

Show all algebraic work (and check odd only)

1) $\frac{g}{3} + 4 = 7$ <u>check</u>	2) $\frac{g-1}{3} = 12$
3) $\frac{1}{4}y - \frac{2}{3} = \frac{5}{6}$ <u>check</u>	4) $\frac{x+7}{6} = -4$
5) $4x + 42 = 2x + 18$ <u>check</u>	6) $-30 + 12x = 7x + 50$

- 7) Translate and solve: Nine less than half n is equal to one plus the product of $-\frac{1}{8}$ and n . Find the value of n .
- 8) The Ocean Hotel charges its guests \$1 plus \$0.80 per minute for long distance calls. Across the street, the Bay Hotel charges its guests \$2 plus \$0.75 per minute for long distance calls. Find the length of a call for which the two hotels charge the same amount.
- 9) If $2x + 7 = -9$, what is the value of $15 - 4x$?
- 10) If $3d - 1 = 17$, what is the value of $d - 2 = c$?