## Lesson 13: Making New, True Equations

* Let’s practice solving equations.

### 13.1: Math Talk: Evaluating Expressions

Find the value of $y$ when $x=5$.

$y=3x−4$

$y=\frac{2}{5}x+4$

$y=2x+3+\left(3x−1\right)$

$y=4x−\left(x+1\right)$

### 13.2: Solving for a Variable

Solve for the indicated variable.

1. Solve for $k$. $2t+k=6$
2. Solve for $n$. $10n=2p$
3. Solve for $c$. $12−6d=3c$
4. Solve for $g$. $h=8g+4$
5. Solve for $x$. $4x+3y=12$
6. Solve for $y$. $4x+3y=12$

### 13.3: Solving Some Equations

Solve each equation.

| row | column A | column B |
| --- | --- | --- |
| 1 | $4\left(2x+8\right)−10=14$ | $4+2\left(-3x+5\right)=20$ |
| 2 | $3\left(x−4\right)+6=60$ | $3\left(\frac{1}{2}x+9\right)−5=55$ |
| 3 | $4\left(\frac{x+3}{2}\right)−5=10$ | $7−2\left(6x+1\right)=-49$ |
| 4 | $2x+\left(5−3x\right)=14$ | $1=5x+10−4x$ |
| 5 | $4x+2\left(3−x\right)=16$ | $x+2\left(x−4\right)+5=12$ |
| 6 | $2x−2\left(3x−1\right)=8$ | $-6x+2\left(4x+5\right)=7$ |

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