45. $\frac{7}{2x+1} - \frac{8x}{2x-1} = -4$

$\frac{7(2x-1)}{(2x+1)(2x-1)} - \frac{8x(2x+1)}{(2x+1)(2x-1)} = \frac{-4(2x+1)(2x-1)}{(2x+1)(2x-1)}$

$\frac{14x-7}{(2x+1)(2x-1)} - \frac{16x^2+8x}{(2x+1)(2x-1)} = \frac{(-8x-4)(2x-1)}{(2x+1)(2x-1)}$

$14x-7-16x^2-8x = -16x^2+8x-8x+4$

$-16x^2+6x-7 = -16x^2+4$

$+16x^2 \quad +16x^2$

$6x-7 = 4$

$+7 \quad +7$

$\frac{6x}{6} = \frac{11}{6}$

$x = \frac{11}{6}$

41. $\frac{1}{x-3} + \frac{1}{x+3} = \frac{10}{x^2-9}$

$\frac{x+3}{(x+3)(x-3)} + \frac{x-3}{(x+3)(x-3)} = \frac{10}{(x+3)(x-3)}$

$\frac{2x}{2} = \frac{10}{2}$

$x = 5$

R2.2

1. x
$x+1$
Sum
$x + x+1$
$2x+1$

3. $d=rt$
$d=50t$

5. % (amount)
$.2x$

9. $1200 + 25x$

13. x 31
$5x$ 185
$5x - x = 148$
$\frac{4x}{4} = \frac{148}{4}$
$x = 37$

17. ~~$339~~ Coworker x
~~$346~~ You $.15x + x$
$1.15x$
$x + 1.15x = 645$
$\frac{2.15x}{2.15} = \frac{645}{2.15}$
$x = 300$

% Increase
% Decrease
$\frac{\text{Big} - \text{Small}}{\text{Original}}$

21. % Decrease
$\frac{460,998,007 - 290,271,960}{460,998,007}$

45. PR90

"Fast" 55 mph $d = 55t$

"Slow" 40 mph $d = 40t$

$55t - 40t = 5$

$\frac{15t}{15} = \frac{5}{15}$

$t = \frac{1}{3}$ hr 20 min

51. $I = Prt$

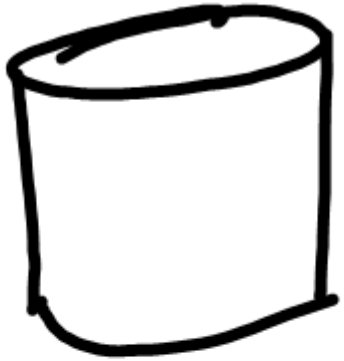
$I_A = 12000\,(.095)\,(1)$

$I_B = 8000\,(r)\,(1)$

$12000\,(.095) + 8000r = 2054.40$

10. $V = \pi r^2 h$

$\frac{}{\pi r^2} \quad \frac{}{\pi r^2}$



Solve for h

$$\frac{V}{\pi r^2} = h$$