64 $\frac{1}{5}(2y-1) - 2 = \frac{1}{2}(3y-5) + 3$

$a(bc+d) = abc + ad$

LCD = 10

$\frac{2}{\cancel{10}}\left(\frac{1}{\cancel{5}}\right)(2y-1) - 10(2) = \frac{5}{\cancel{10}}\left(\frac{1}{\cancel{2}}\right)(3y-5) + 10(3)$

$2(2y-1) - 20 = 5(3y-5) + 30$

$4y - 2 - 20 = 15y - 25 + 30$

$4y - 22 = 15y + 5$

$-15y + 22 = -15y + 22$

$-11y = 27$

$y = -\frac{27}{11}$

64 $\frac{1}{5}(2y-1) - 2 = \frac{1}{2}(3y-5) + 3$

$\frac{1}{5}\left(2\left(-\frac{27}{11}\right)-1\right) - 2 = \frac{1}{2}\left(3\left(-\frac{27}{11}\right)-5\right) + 3$

$\frac{1}{5}\left(-\frac{54}{11} - 1\cdot\frac{11}{11}\right) - 2 = \frac{1}{2}\left(-\frac{81}{11} - 5\cdot\frac{11}{11}\right) + 3$

$\frac{1}{5}\left(\frac{-54-11}{11}\right) - 2 = \frac{1}{2}\left(\frac{-81-55}{11}\right) + 3$

$\frac{1}{5}\left(-\frac{65}{11}\right) - 2 = \frac{1}{2}\left(\frac{-136}{11}\right) + 3$

$\frac{1}{\cancel{5}}\left(-\frac{\cancel{65}^{13}}{11}\right) - 2 = \frac{1}{\cancel{2}}\left(\frac{\cancel{-136}^{-68}}{11}\right) + 3$

$-\frac{13}{11} - 2\cdot\frac{11}{11} = -\frac{68}{11} + 3\cdot\frac{11}{11}$

$-\frac{13-22}{11} \stackrel{?}{=} \frac{-68+33}{11}$

$-\frac{35}{11} = -\frac{35}{11}$

§ 2.2 An Introduction to Problem Solving

General Strategy for Problem Solving

1) UNDERSTAND the problem. During this step, become comfortable with the problem. Some way of doing this are:
   - Read and reread the problem
   - Propose a solution and check.
   - Construct a drawing.
   - Choose a variable to represent the unknown
2) TRANSLATE the problem into an equation.
3) SOLVE the equation.
4) INTERPRET the result. *Check* the proposed solution in stated problem and *state* your conclusion.

§2.2 #5 24, 29, 42, 49, 67 HAND IN Due Fri.

Practice: Vocabulary & Readiness Pg 62
+ as many as you need / have time to do.

HINT on # 67

30% of x is $.3x = \frac{30}{100}$

110% -- .. .. $1.1x = \frac{110}{100}$

§2.3 #5 20, 27, 42, 54 HAND IN

Bonus Assignment — Figure out what the heck the "1st angle" is in §2.2 #49 and solve it. Due Fri.

The product of twice a number and three is the same as the difference of five times the number and ¾. Find the number.

Let x = the number

$(2x)(3) = 5x - \frac{3}{4}$

five times the difference of the number and $\frac{3}{4}$

$5(x - \frac{3}{4})$

Age Problem Today Henry is 7 years older than twice his age of 23 years ago. Find Henry's age today.

x = His current age

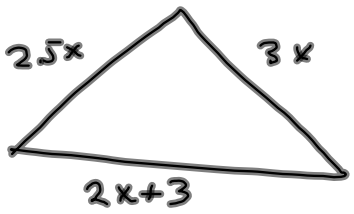
x − 23

2(x − 23)

x = 2(x − 23) + 7

A triangle has sides measuring 2.5x cm, 3x cm, and (2x + 3) cm. It's perimeter measures 60 cm. Find the measures of the sides.

It's



2.5x + 3x + 2x + 3 = 60

x is heck I dunno,

etc.

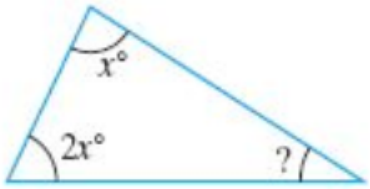
Other Examples from the book and how to write them up (from the exercises).

(34) The sum of 3 consecutive odd integers is 327. Find the integers.

x = the smallest of the 3 integers

$x + (x+2) + (x+4) = 327$

△ **49.** Find the measures of the angles of a triangle if the measure of one angle is twice the measure of a second angle and the third angle measures 3 times the second angle decreased by 12.



1st =
2nd =
3rd =

65. China, the United States, and Russia are the countries with the most cellular subscribers in the world. Together, the three countries have 34.8% of the world's cellular subscribers. If the percent of world subscribers in China is 3.1 less than 4 times the percent of world subscribers in Russia, and the percent of world subscribers in the United States is 4.3% more than the percent of world subscribers in Russia, find the percent of world subscribers for each country. (*Source:* Computer Industry of America)