October 6, 2006 Algebra Regular Contest

Combine like terms: ~~$-3a + 5b - 4a + 6b + 2ab + 7a$~~ $- 8$

$7a^2 - 7a + 2ab + 11b - 8$

from next page

$3x + 18 = 5x - 20$

$-18 \qquad -18$

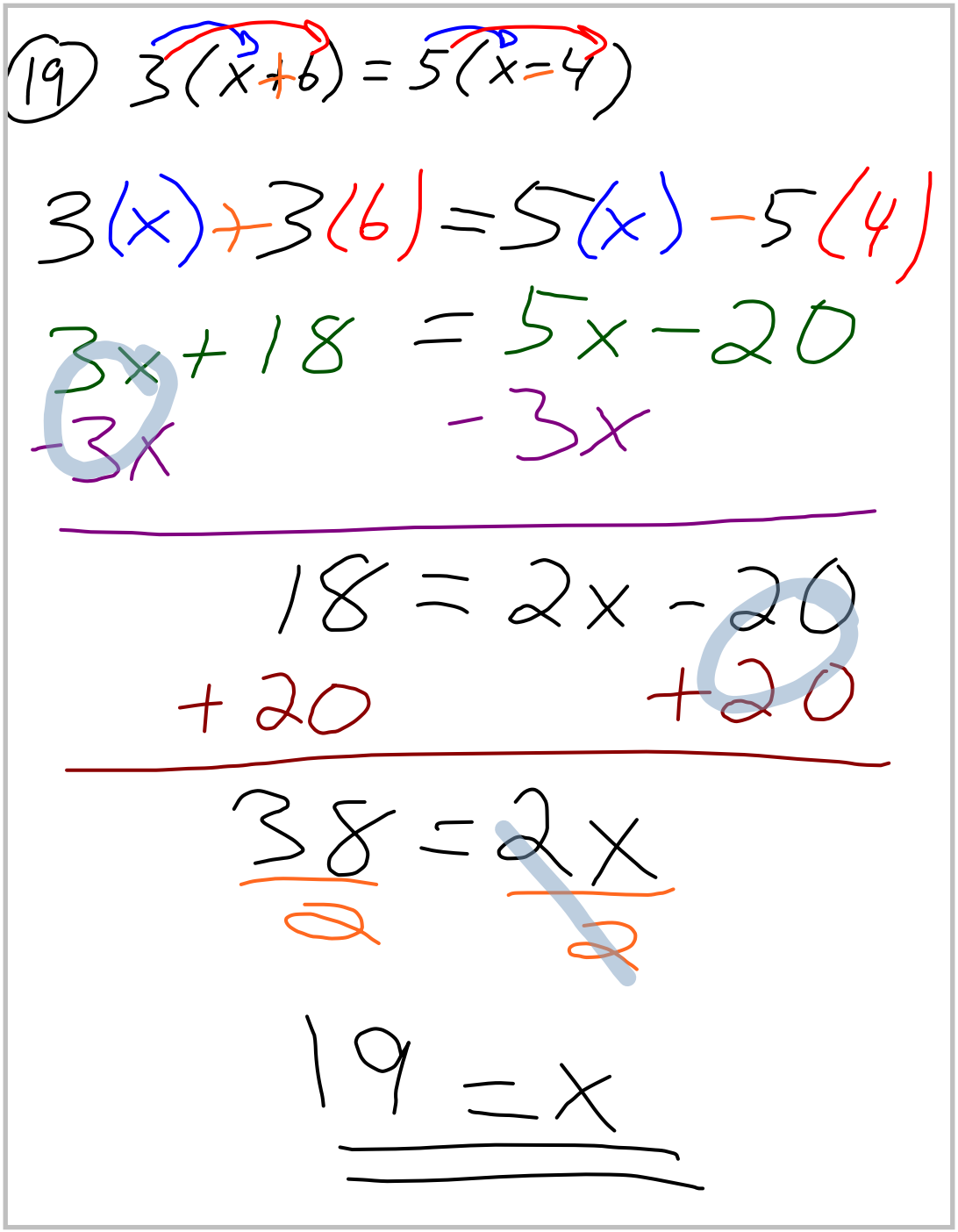
$3x = 5x - 38$

$-5x \quad -5x$

$-2x = -38$

$\frac{-2x}{-2} = \frac{-38}{-2}$

$x = 19$


19) 3(x+6) = 5(x-4)
3(x)+3(6) = 5(x)-5(4)
3x + 18 = 5x - 20
-3x -3x
18 = 2x - 20
+20 +20
38 = 2x
2 2
19 = x

3.7 Formulas

Oct. 17, 2006

* Taking equations with more than 1 variable + solving for a special variable

Celsius vs. Fahrenheit

Get 'F' by itself

$$\frac{9}{5}C = \frac{9}{5}\left(\frac{5}{9}(F-32)\right)$$

Side Bar

$$\frac{9}{5}\left(\frac{5}{9}\,\text{☺}\right) = C \cdot \frac{9}{5}$$

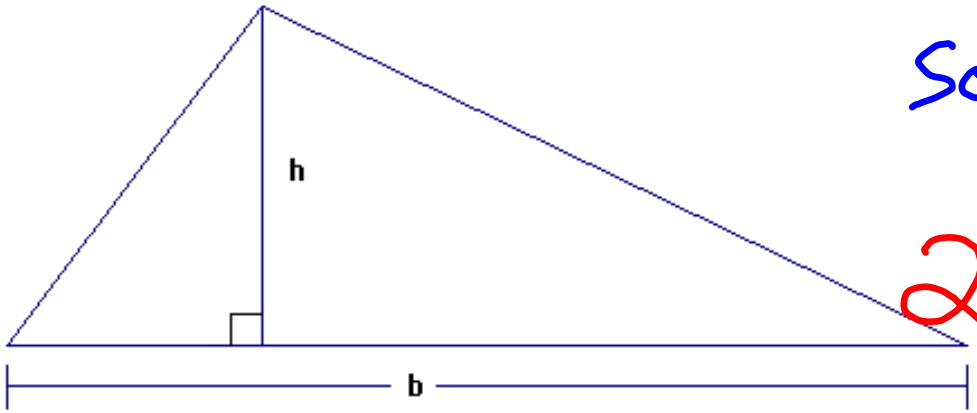
$$\frac{9}{5}C = F - 32$$

$+32 \qquad +32$

$$\frac{9}{5}C + 32 = F \qquad C = \frac{5}{9}(F-32)$$

Same

The Formula for the Area of a △ is: $A = \frac{1}{2} b \cdot h$

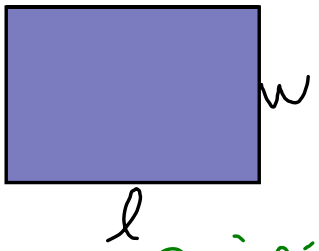


Solve for `b'

$2 \cdot A = 2\left(\frac{1}{2} b \cdot h\right)$

$\frac{2A}{h} = \frac{b \cdot h}{h}$

$\frac{2A}{h} = b$



The Formula for the Area of a Rectangle is:

$A = l \cdot w$

Solve for 'l'

$\frac{A}{w} = l$

Use the formula above to find 'l' if the Area is $35ft^2$ & the $w = 7ft$

$\frac{A}{w} = l$

$\frac{35ft^2}{7ft} = l$

$\frac{5\cancel{35} \cdot ft \cdot ft}{\cancel{17} \cdot ft} = l$

$5ft = l$

Density : $d = \frac{m}{V}$

Solve for `m'

$V \cdot d = \frac{m}{V} \cdot V$

$Vd = m$

O.T.L.

① pg 174-175 : 1-26 all