Algebra I
3.1 Worksheet
Solving Equations

NAME:_____
DATE:_____ HOUR:____

Solve each equation. Show your work. Box your answers.

True or false?
You would get more use out of a solar-powered calculator at the North Pole than at the South Pole.

To check your answer:

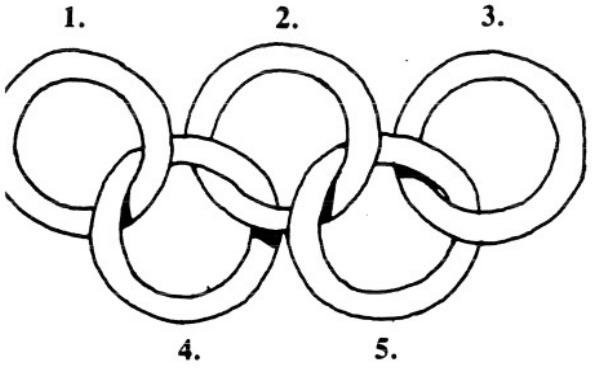
- **Solve each equation.**
- **Then write each letter over its matching answer in the Decoder.**

$-4c = 40$ **A**	$5c = -35$ **D**	$-8z = -80$ **E**	$6a = -96$ **F**
$-2q = 28$ **G**	$11a = 121$ **H**	$-13j = 39$ **T**	$12w = -156$ **L**
$\frac{n}{5} = -1.5$ **M**	$8t = 96$ **N**	$\frac{d}{-9} = 54$ **O**	$2g = 9$ **P**
$-4u = 18$ **R**	$\frac{r}{-6} = 82$ **S**	$4r = -32$ **T**	$\frac{f}{-3} = -78$ **U**
$-3s = 57$ **W**	$\frac{v}{21} = -5$ **Y**	$-6s = 360$ **E**	$\frac{h}{15} = -3$ **S**

DECODER

-8 -4.5 234 10	-8 11 10	12 -486 -4.5 -3 11	4.5 -486 -13 -60	
-14 10 -8 -492	-486 12 -60	11 234 12 -7 -4.5 10 -7	-8 -19 -60 12 -3 -105	
-7.5 -486 -4.5 10	11 -486 234 -4.5 -45	-486 -16	-45 234 12	4.5 10 -4.5
-105 -60 -10 -4.5	-8 11 -10 12	-8 11 10	-492 -486 234 -3 11	
4.5 -486 -13 -60				

Solve each equation. Show your work. Box your answers.



Can you name the colors of the five rings in the Olympic flag?

- Solve each equation.
- Then cross out each card containing an answer.
- Unscramble the letters on the remaining cards.

$18 + f = 64$ $\quad m(15) = 195$ $\quad 180 = w(20)$ $\quad 155 = w - 33$

E 82	O 13	B 180	R 9	W 188	U 122	N 46	L 8	RING 1	

$m - 38 = 38$ $\quad 37 = w + 29$ $\quad 42 = 8x$ $\quad 34 = \frac{e}{8}$

K 66	O 76	U 5.25	L 7	B 225	E 8	A 0	R 272	C 5.5	RING 2

$4.6 = \frac{a}{9}$ $\quad g - 6.9 = 11.7$ $\quad 0.92 = y + 0.76$ $\quad d + 18.8 = 21.7$

D 1.68	O 0.16	G 18.6	R 40.5	N 41.4	E 4.8	A 2.9	RING 3		

$5.9 = \frac{r}{3.8}$ $\quad 3.75 = k(0.5)$ $\quad 11 = 9.8 + s$ $\quad 8.4 = m(1.2)$

W 20.8	R 22.42	L 9.7	O 0.13	L 9.6	G 7.5	E 0.14	E 1.2	Y 8.5	N 7	RING 4

$1.37 = m - 0.69$ $\quad b(1.9) = 6.84$ $\quad 7.9 + t = 9.01$ $\quad \frac{n}{9.6} = 8.9$

N 16.9	E 0.78	O 85.44	R 63.1	E 8.7	A 1.11	G 18.5	E 2.06	D 3.6	RING 5