

Boomerangs

Phil and Cath make and sell boomerangs for a school event.
The money they raise will go to charity.

They plan to make them in two sizes: small and large.

Phil will carve them from wood.

The small boomerang takes 2 hours to carve and the large one takes 3 hours to carve.

Phil has a total of 24 hours available for carving.

Cath will decorate them.

She only has time to decorate 10 boomerangs of either size.

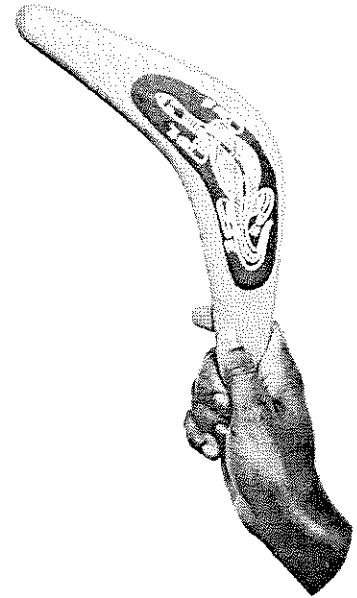
The small boomerang will make \$8 for charity.

The large boomerang will make \$10 for charity.

They want to make as much money for charity as they can.

How many small and large boomerangs should they make?

How much money will they then make?



REVIEW ALGEBRA ONE

NAME _____

1. If: $A = 5(x - 6) + 30$
 $B = 12 - 6(12 - 2x)$
 $C = 9x + 4$

AND IF: $A + B = C$

Find the values of A, B and C

2. If: $M = 3 - 5(2 - x)$
 $N = -1 + 7(x - 6) - 2x$
AND IF: $M + N = 90$

Find the values of M and N

3 - 4 Solve for the common solution (The solution for x and y which makes both equations true)

3. $3x - 4y = -43$
 $2x + 3y = 11$

4. $4x - 2y - 30 = 4(y - x) + 62$
 $11x + 7(y + 2) = 2(3x + 5y) + 64$

1. $x = 8$

2. $x = 14$

3. $(-5, 7)$

4. $(4, -10)$