

# Let's Recycle

Andy collects plastic bottles, soda cans, and paper bags for recycling. The recycling machine will give change back (in cents). The rates appear below.



$$6p = \text{cents}$$



$$4s = \text{cents}$$



$$3b = \text{cents}$$

Letter  $p$  represents the number of plastic bottles he puts in.

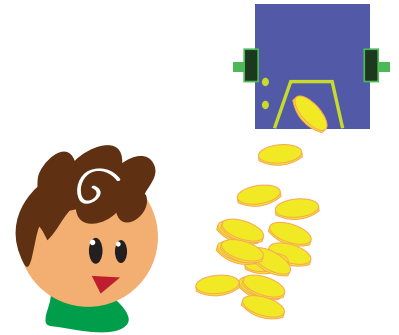
Letter  $s$  represents the number of soda cans he puts in.

Letter  $b$  represents the number of paper bags he puts in.

On Monday, Andy put 10 plastic bottles, 4 soda cans, and 5 paper bags into the machine. Find the total amount of change Andy will get if he puts these items in the machine.

- Change earned from the plastic bottles =  $6p$ , where  $p = 10$   
 $6(10) = 60$  cents, or \$0.60
- Change earned from soda cans =  $4s$ , where  $s = 4$   
 $4(4) = 16$  cents, or \$0.16
- Change earned from the paper bags =  $3b$ , where  $b = 5$   
 $3(5) = 15$  cents, or \$0.15

Andy gets  $60 + 16 + 15 = 91$  cents (\$0.91) from the recycling machine.



Directions: Answer these questions using the formulas above.

1. On Wednesday, Andy put in 8 plastic bottles, 12 soda cans, and 7 paper bags into the machine. How much money did he earn on Wednesday?
2. On Friday, Andy put in 25 plastic bottles, 18 soda cans, and 9 paper bags into the machine. How much money did he earn on Friday?
3. How much total money did Andy get on Wednesday and Friday?