

You have 20 minutes to complete this quiz. No calculators allowed. Please show your work carefully! Good luck!

For numbers 1-2, solve each word problem by following the problem solving steps. Be sure to define a variable, write and solve an equation, and answer in a complete sentence.

1. How many pounds of gummy bears costing \$2 per pound must be mixed with 10 pounds of gummy worms costing \$5 per pound to obtain a mixture costing \$4 per pound?

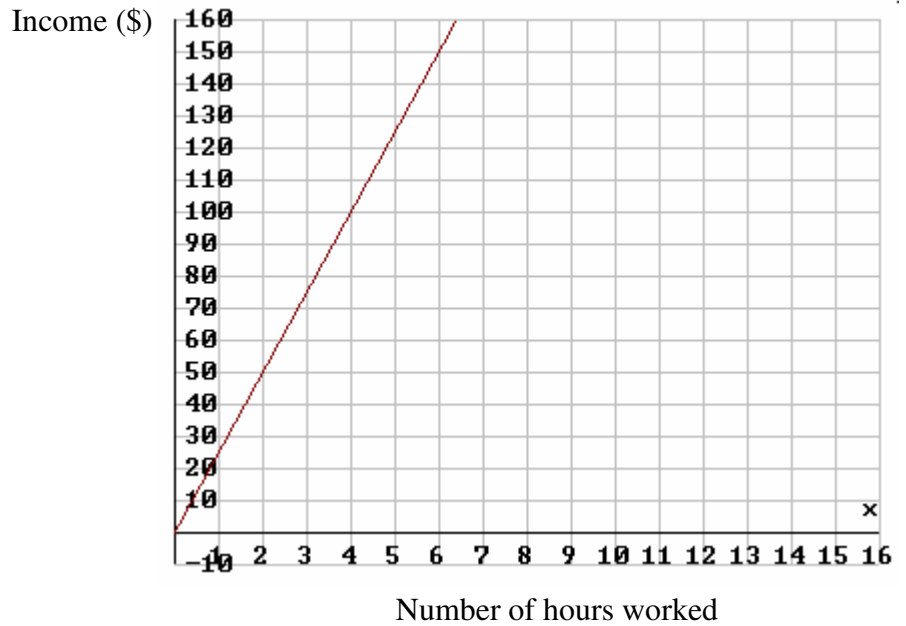
The mix requires 5 pounds of gummy bears.

2. At the end of a certain game, points are given based on how many blue, red, and green chips you have left. Blue chips are worth 1 point, red chips are worth 3 points, and green chips are worth 5 points. Suppose you have twice as many red chips as blue chips, and three fewer green chips than blue chips. If your score is 33 points, how many of each color chip do you have?

You have 4 blue, 8 red, and 1 green chips.

The table below shows the relationship between an employee's income and the number of hours she works. Each row of data represents an ordered pair. Plot the data in the graph below, and draw a straight line through the points. Remember to number the axes.

Number of hours worked	Income (\$)
2	\$50
3	\$75
6	\$150



3. Use the graph you drew above to predict what the employee's income is if she works for 4 hours.

Her income will be \$100.

4. Sketch a graph of the equation $y = 2x - 3$. Include at least three solutions in the table below.

x	y
-2	-7
0	-3
2	1

More answers possible

