

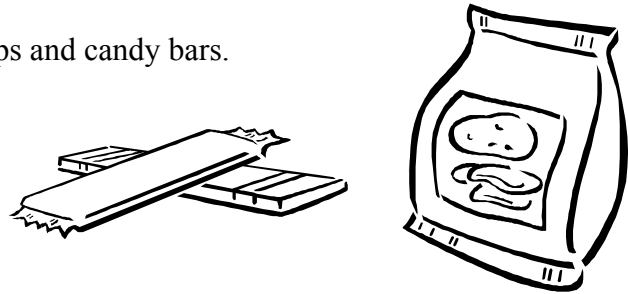
Name \_\_\_\_\_

**Buying Chips and Candy****Grades 9–10**

This problem gives you the chance to:

- form and solve a pair of linear equations in a practical situation

Ralph and Jody go to the shop to buy potato chips and candy bars.



Ralph buys 3 bags of potato chips and 4 candy bars. He spends \$3.75.

Jody buys 4 bags of potato chips and 2 candy bars. She spends \$3.00.

Later Clancy joins Ralph and Jody and asks to buy one bag of potato chips and one candy bar from them. They need to work out how much he should pay.

Ralph writes

$$3p + 4b = 375$$

1. If  $p$  stands for the cost, in cents, of a bag of potato chips and  $b$  stands for the cost, in cents, of a candy bar, what does the 375 in Ralph's equation mean?

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2. Write a similar equation, using  $p$  and  $b$ , for the items Jody bought.

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Name \_\_\_\_\_

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**Buying Chips and Candy, continued**

**Grades 9–10**

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3. Use the two equations to figure out the price of a bag of potato chips and the price of a candy bar.

potato chips \_\_\_\_\_

candy bar \_\_\_\_\_

Show your work.

4. Clancy has just \$1. Does he have enough money to buy a bag of potato chips and a candy bar?

Explain your answer by showing your calculation.

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