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### Jennifer's Jobs

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Jennifer is a college student who works two jobs after school and on weekends trying to make some extra spending money and to help pay for her tuition. At Job A, she gets \$8 an hour, and at job B, she gets \$10 an hour.

1. If Jennifer only works at Job A, write an equation for her total income  $I$  for working  $a$  hours.
  - a. How much will she make if she works 20 hours in the week? Justify your answer.
  - b. If she wants to make \$200 dollars per week, how many hours would she have to work? Justify your answer.
  
2. If Jennifer only works at Job B, write an equation for her total income  $I$  for working  $b$  hours.
  - a. How much will she make if she works 20 hours in the week? Justify your answer.
  - b. If she wants to make \$300 dollars per week, how many hours would she have to work? Justify your answer.
  
3. If Jennifer works at both Job A and Job B during the week, write an equation for her total income for working  $a$  hours at Job A and  $b$  hours at Job B.
  - a. How much will she make if she works 10 hours at each job during the week. Justify your answer.
  - b. If Jennifer wants to make \$200 combined for working her two jobs, find 3 possible combinations of  $a$  hours at Job A and  $b$  hours at Job B that will give her exactly \$200. Justify your answer.