

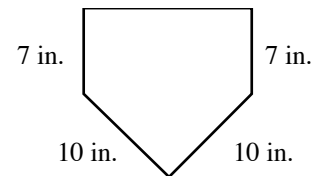
Focus Exercises

Work each application. Write a legend and an equation; solve the equation, and answer the question in a complete sentence.

1. Nate is saving his money to buy an Xbox. So far he has \$73 saved. The model he wants sells for \$162, including tax. How much more money does Nate need to pay for the Xbox?
2. Shika needs 132 yards of material to make enough doll dresses to sell at the craft fair. She already has 58 yards of material. How many more yards of material does Shika need?
3. Adam has saved \$900 for his vacation. He has figured that he'll spend \$380 on the hotel room, \$140 on meals, and \$115 on transportation. How much will Adam have left over to spend on other things during his vacation?
4. A cab company spends \$18,652 per year in insurance for its drivers. Insuring a new driver costs \$1,208. How much total insurance will the company pay if it adds one more driver?
5. Sandra works for the city accounting office. She must prepare a report for the city manager listing a variety of costs that must be paid. For example, it cost the city \$21,000 to operate and maintain the public pool. So far, the city has collected \$19,629 from user fees. How much more must the city collect to equal the costs of operating the pool?
6. Through a regular deduction from her paycheck, Alexis paid a total of \$2,867 last year for federal taxes. In filing her income tax return, she really needed to pay \$3,052. How much does Alexis still owe on her federal taxes?
7. Kinko's is putting together 5,000 brochures for a company, due tomorrow at noon. Kelley has assigned the job to three different workers, each using a different photocopier. Heather's copier has produced 1,758 copies; Omar's copier has produced 1,365 copies; and Carla's copier has produced 1,259 copies. How many copies are left to produce?
8. The billing department in a large company had \$15,000 in their annual supplies budget. So far this year they have purchased a computer system for \$3,193, new furniture for \$2,607, and various office supplies for \$612. It's Rika's job to update the department's budget. How much is left in the supplies budget after these purchases?
9. Ajay belongs to the local carpenter's union. He pays \$252 per year in union dues. If they are spread equally over 12 months, how much does Ajay pay each month in union dues?
10. Kami owns an embroidery business, and she just received a rush order. She has to embroider 168 caps in 7 days. How many caps, on average, must Kami embroider each day?

- 11.** Beth is a nutritionist. She has many overweight clients. Most of her clients are referred to her by doctors who work at a nearby hospital for eating disorders.
- a) One of her heaviest clients has been put on a strict diet and exercise program by his doctor. His total weight loss, over a 6 month period, was 138 pounds. How much many pounds did he lose, on average, each month?
- b) Beth has another client, Lona, who is on a plan to lose 15 pounds a month for 12 months. Assuming that Lona stays on the plan, what will her total weight loss be?
- 12.** Mansour owns a courier service and uses his small plane to make deliveries.
- a) One customer has asked him to deliver 25 boxes, each weighing 42 pounds. How much cargo will Mansour's plane be carrying?
- b) A customer has 24 boxes weighing a total of 864 pounds. What is the average weight of each box?
- 13.** Aimee pays \$375 for rent each month. How much does Aimee pay in rent for a full year?
- 14.** Allison works at a printer. The business often receives large printing orders for pamphlets and flyers. One customer wants 3,200 flyers printed and needs them right away. Allison decides to use 5 printing machines to do the job. On average, how many flyers will each machine print?

- 15.** The home plate in a youth sports league is shown at right. The perimeter of the plate is 48 inches. What is the length of the top side?



- 16.** The Bermuda Triangle, famous for disappearing ships and planes, forms a triangle between three Atlantic locations: Miami, Bermuda, and San Juan. The perimeter of this triangle is 2,992 miles. The distance from Bermuda to Miami is 1,059 miles. The distance from Bermuda to San Juan is 955 miles. What is the distance from San Juan to Miami?
- 17.** A rectangular plot of land is a full acre: 4,840 square yards. If the width is 40 yards, what is the length of the rectangle? Draw a rectangle and place the known measures around it.
- 18.** A hotel pool is in the shape of a rectangle. The rectangle is 15 yards wide and has an area of 540 square yards. What is the length of the pool?