

**UNIT 2 WORKSHEET 3**  
**INEQUALITY WORD PROBLEMS**

1. Find three consecutive even integers whose sum is between 46 and 62.
2. Find three consecutive odd integers whose sum is between 60 and 74.
3. Find three consecutive even integers whose sum is between 80 and 91.
4. Find three consecutive odd integers whose sum is between 75 and 91.
5. So far this season, Frank has scored 14, 18, 12, and 16 points in each of his last basketball games. How many points will Frank need to score in the next game if he wants to average 15 points per game?
6. John received scores of 64, 72, 76, 70 and 80 on his last five exams. What will he need to score on the next exam to have an average of at least 74?

**For the following problems, translate each sentence into a mathematical equation. Be sure to identify the meaning of symbols. (Example if  $A = 2l + 2w$   $A$  = area,  $l$  = length, and  $w$  = width.)**

7. Geometry: The area of a circle is the product of  $\pi$  and the square of the radius.
8. Geometry: The circumference of a circle is the product of the number  $\pi$  and twice the radius.
9. Geometry: The area of a square is the square of the length of a side.
10. Geometry: The perimeter of a square is four times the length of a side.
11. Physics: Force equals the product of mass and acceleration.
12. Physics: Work equals force times distance.
13. Jane is paid an hourly rate of \$9.50 per hour. Find the equation that represents Jane's monthly pay.
14. Samuel earns a salary of \$3500 a month. If he decided to put in overtime, he is paid at a rate of \$35 per hour. Find the equation that represents Samuel's monthly pay whether he works overtime or not.
15. Cathy makes jewelry for a living. Her fixed costs for the month are \$4200. It costs Cathy \$82 in raw materials per piece of jewelry she makes. She sells her Jewelry for \$350 each. How many pieces of jewelry must Cathy sell each month in order to break even?