1. Anh earns $5.95 per hour working after school. He needs at least $215 for his holiday shopping. How many hours must he work to reach his goal?

   [A] at least 37 hours   [B] at least 35 hours

   [C] at least 36 hours   [D] at least 38 hours

2. Jake earns $9.85 per hour working at a software company. He wants to earn at least $300 a week. How many full hours must he work to earn the money?

3. At a computer chip factory, a machine temporarily malfunctioned and damaged 2700 chips. Normally, 150 chips are damaged, and 400 are produced in good condition each day. How many days will it take for the factory to recover from the malfunction? Plot your answer on a number line.

4. The cost per month of making n number of wooden toys is $C = 3n + 30$. The income from selling n toys is $I = 6n$. How many toys must the company make to get a profit $(I > C)$?

5. A club can buy ready-made shirts for $14.50 each. Alternately, it can buy plain T-shirts for $6.25 each, fabric paint for $35.70, and a pack of stencils for $8.50. For how many shirts is stenciling plain T-shirts cheaper than buying ready-made shirts?

6. Use any problem solving strategy to solve the following problem. Members of the band boosters are planning to sell programs at football games. The cost to print the programs is $150 plus $0.50 per program. They plan to sell each program for $2. How many programs must they sell to make a profit of at least $500?

7. Use any problem solving strategy to solve the following problem. At a local health club, members pay a flat fee of $75 and then $10 a month to use the facilities. Non-members can pay a monthly fee of $30 to use the facilities. Garth wants to use the facilities for 8 months and pay the non-member monthly fee. Is the non-member rate less expensive for him? If not, what would the non-member rate need to be for it to be less than the member fees?

8. Use any problem solving strategy to solve the following problem. The seating in a stadium is composed of benches that are marked with numbers to identify individual seats. Each seat in the stadium is to be at least 15 inches wide. Find the maximum number of seats that will fit on a 12-foot long bench.

[1] A

[2] 31 hours
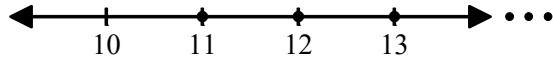
[3]

[4] at least 11 toys

[5] 6 or more shirts

[6] at least 434 programs

[7] No; $19.37 a month or less.

[8] 9