1. Translate to an inequality.

   The temperature is at least $-11°C$.

   The sentence written as an inequality is ☐ .
   (Do not include the degree symbol in your answer. Type an inequality using t as the variable.)

2. Translate to an inequality using the variable x.

   The price of a car exceeded $47,957.

   The inequality is ☐ .
   (Type an inequality. Do not include the $ symbol in your answer.)

3. Translate to an inequality.

   The average speed, s, was between 90 and 120 mph.

   Translation: 90 mph ☐ s ☐ 120 mph

4. Miranda's financial aid stipulates that her tuition not exceed $1500. If her college charges a $55 registration fee for the term plus $350 per course, what is the greatest number of courses for which Miranda can register?

   Miranda can register for at most ☐ courses.
   (Your answer should be a whole number.)

5. You are taking a math course in which there will be four tests, each worth 100 points. You have scores of 89, 95, and 99 on the first three tests. You must make a total of 360 in order to get an A. What scores on the last test will give you an A?

   The solution is $\{s \mid s \geq$ ☐ $\}$.
   (Simplify your answer. Type an integer or a decimal.)

Student: Timothy Busken	**Instructor:** Timothy Busken	**Assignment:** Section 2.7: Solving
Date: 9/16/14	**Course:** Math 55 Section 70253	Applications of Inequalities
Time: 6:42 AM	12:50 pm	
	Book: Bittinger: Elementary &	
	Intermediate Algebra, Concepts and	
	Applications, 6e	

6. Following the guidelines of the Food and Drug Administration, Dale tries to eat at least 5 servings of fruit each day. For the first six days of one week, she had 4, 6, 3, 4, 3, and 5 servings. How many servings of fruit should Dale eat on Saturday to average at least 5 servings per day for the week?

For Dale to average at least 5 servings of fruit per day of the week, she must eat

○ A. more than 10 servings on Saturday.

○ B. at least 10 servings on Saturday.

○ C. more than 5 servings on Saturday.

○ D. at least 5 servings on Saturday.

○ E. none of the above.

7. One side of a triangle is 2 cm shorter than the base. The other side is 3 cm longer than the base. What lengths of the base will allow the perimeter to be greater than 19 cm?

Lengths of the base greater than ☐ cm will allow the perimeter to be greater than 19 cm.
(Type an integer or a decimal.)

8. Most insurance companies will replace a vehicle any time an estimated repair exceeds 80% of the "blue-book" value of the vehicle. Michelle's insurance company paid $8900 for repairs on her car after an accident. What can be concluded about the blue-book value of the car?

The 'blue book' value of Michelle's car ☐ $☐ .
(Type an inequality symbol and then an integer.)

9. A landscaping company is laying out a triangular flower bed. The height of the triangle is 14 ft. What lengths of the base will make the area at least 196 ft^2?

The base must be at least ☐ ft.

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10. The formula R = − 0.075t + 3.85 can be used to predict the world record in the 1500 meter run, t years after 1930. Determine an inequality that identifies the years in which the world record will be less than 3.7 minutes.

Solve for t.

t > ☐
(Round to the nearest whole number.)

The years after 1930, in which the record is less than 3.7 minutes, are described by the solution set {Years | Years > ☐ }.