Name _____ Date _____ Per. _____

M7A Chapter 8 Practice Test

1. What value of m makes the equation $\frac{1}{15} = \frac{3}{5}m$ true?

2. Solve $7x - 9 = -30$.

3. Which inequality is graphed on the number line shown?

A. $x < -3$

B. $x \leq -3$

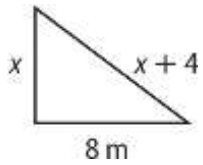
C. $x \geq -3$

D. $x > -3$

4. The side lengths, in centimeters, of a triangle are $3x$, 15, and $4(x - 1)$. The perimeter of the triangle is 60 centimeters. What is the length of the longest side of the triangle?

5. A computer game lets you build your own amusement park. Suppose it costs you $25,000 a day to run the park. Assume the average daily attendance is 1250 people. How much should you charge for admission if you want to make a profit of at least $30,000 for a 30-day month? Write an inequality to represent this situation, and solve.

Hints:
What is the average profit you want to make each day?

6. Taylor attached 24 ribbons to a jacket in $\frac{4}{5}$ hour. At this rate, how many ribbons could he attach in one hour?	
7. The perimeter of the triangle shown is 24 meters. What is the length of the shortest side of the triangle? 	
8**.** Solve $0.5(8x - 12) = -10$.	
9**.** Three times the quantity $h + 4$ equals four times the quantity $h - 1$. What value of h makes this sentence true?	
10. Solve and graph 18 > -12 + 6m	