Chapter 4 Take Home Test

Algebriac Equations and Inequalities

Chapter 4 Test
Name_____
Class _____

Ms. Angie
Date_____

Solve each equation. Show all your work and box your final answer.

1.) $3 + 4x = 19$

2.) $7.4r - 9 - 2r = 18$

2.) $8x - 7 = 17$

4.) $4 - 6x = 8$

Solve each inequality. Graph each answer on a number line.

5.) $10 + 8x < 16$

6.) $5(3x - 2) > 2 + 3x$

7.) $4 \leq 3 - 2y$

8.) $6 \leq 1 - 5x$

9.) $3 (x + 1) > 5x + 7$

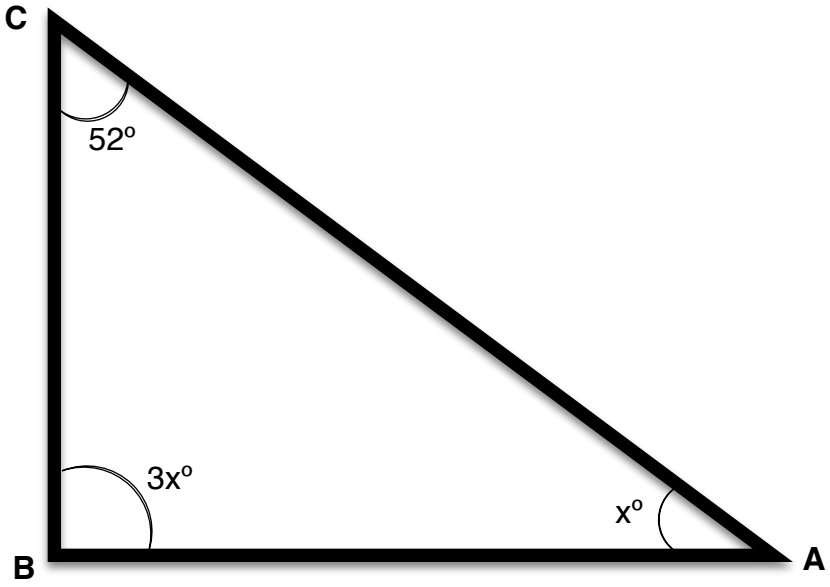
10.) $2(3 - x) \leq 8$

Write an equation for each problem. Solve and show your work.

11.) Graham spent a total of $7.25 on 8 oranges and a packet of strawberries. If a packet of strawberries cost $2.85, how much did each orange cost?

12.) A ski gondola cabin can safely carry x number or people. There are already 2/3x people in the cabin when another 15 are allowed to board it. How many people can the cabin carry?

13.) The sum of the interior angle measures of a triangle is 180º. Angle B is three times the measure of Angle A. Angle C is 52º. Find the value of x.



<u>Write an inequality for each problem.</u> Solve and show your work.

14.) Marvin scored 96, 93, 97, and 92 on four out of the five math tests. In order to receive the highest grade in the class, he must obtain an average score of at least 95 fro the five math tests. What score must he get on the fifth test in order to receive the highest grade? Write an inequality for the problem.

15.) A school is sending six teachers and some students to attend a technology fair. The admission price for teachers is $8.50 each and the admission price for students is $6 each. If the budget set aside by the school for this event is $250, at most how many students can attend the fair?