Math 9 Assignment 3: Algebra and Equations

Name: _____

1. $3x = 12$

2. $15 = -2w$

3. $\frac{x}{4} = 7$

4. $5 = -\frac{b}{3}$

5. $\frac{3}{5} = \frac{\square}{20}$

6. $\frac{5}{\square} = \frac{11}{6}$

7. $3x(5 - 3) = 2$

8. $-3(2 - 7x) = 5$

9. $\frac{x}{4} = \frac{2}{7}$

10. $\frac{5}{7} = \frac{3}{x}$

11. $\frac{3}{x} = 9$

12. $-2 = \frac{4}{t}$

13. $3 - x = 2(x + 5)$

14. $-3(4x - 1) = 2 + x$

15. $\frac{3}{x+2} = \frac{2}{3}$

16. $\frac{3x-2}{4} = \frac{-3}{4}$

17. $3 + \frac{2}{3} = \frac{1}{5-2x}$

18. $3x + \frac{x}{3} - 2 = 4$

19. $\frac{w}{2} - w + 3 = \frac{5}{2}$

20. $2 - 3x = 2 - \frac{2}{5}(x + 1)$

21. $5x - 3 = \frac{3}{5}\left(\frac{2x}{3} + 2\right)$

22. See diagram below:

The front portion of the car is $\frac{3}{7}$ of its total length. If the remainder of the car is 200 cm, what is the length of the car?