Unit	6:	Inequa	lities
~			

Name:

Hour:

Lesson 5: Solving Inequalities with Fractions

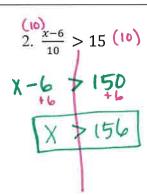
Notes 6.5

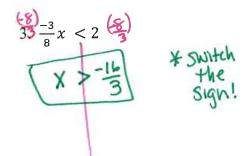
Remember: Dividing by a fraction is the same as multiplying by the reciprocal.

Example: 
$$\frac{3}{5}x = 15$$

$$\left(\frac{5}{3}\right) \cdot \frac{3}{5}x = 15 \cdot \left(\frac{5}{3}\right)$$

## **Solving Inequalities with Fractions**





4. 
$$-\frac{2}{5}x + 6 < \frac{3}{8}$$

-2  $\times (\frac{40}{1}) + 6(\frac{40}{1}) = \frac{3}{8}(\frac{40}{1})$ 

-16  $\times + 240 < \frac{15}{-240}$ 

-16  $\times -\frac{2}{10} = \frac{25}{-16}$ 

-16  $\times -\frac{2}{10} = \frac{25}{-16}$ 

-17 LCM = 40

Multiply every term by the LCM for get rid of fractions!

5. $\frac{4}{3}n + \frac{2}{3} \ge -$	$1\frac{3}{7}$ LCM = 21
4/3n+2/3≥-	10-
날n(각)+ 출(각) = -	7(21)
28n +14 Z	-30 -14

$6. \frac{7}{12} < -n - 1\frac{2}{3}$	*Switch the sign!
72 <-n-\frac{5}{3}	LCM = 12
$\frac{1}{12} \left( \frac{12}{12} \right) < -n \left( \frac{12}{12} \right) - \frac{5}{3} \left( \frac{12}{12} \right)$	K.cusibeh Hao
+20 +20	* switch the

Homework: Solving Inequalities With Fractions Extra Practice wkst.

Adapted:

$$\left[-\frac{9}{4}\right]$$