W-A2 Algebra 2 Week 4

Review 1-3

$2(u + 3v) = w - 5u$ $\quad u =$

SINGING

"DIE FOR YOU" ↗ CARE FOR AMBER

$2u + 6v = w - 5u$

$+5u \qquad +5u$

$7u + 6v = w$

$-6v \qquad -6v$

$\frac{7u}{7} = \frac{w - 6v}{7}$

$u = \frac{w - 6v}{7}$

$k(y + 3z) = 4(y - 5)$ $\quad y =$

$ky + 3kz = 4y - 20$

$-4y \qquad -4y$

$ky - 4y + 3kz = -20$

$-3kz \qquad -3kz$

$ky - 4y = -3kz - 20$

$\frac{y(k-4)}{(k-4)} = \frac{-3kz - 20}{(k-4)}$

$y = \frac{-3kz - 20}{k - 4}$

$12\left(\frac{2}{3}f + \frac{5}{12}g\right) = (1 - fg)12$ $f =$

$\frac{24}{3}f + \frac{60}{12}g = 12 - 12fg$

$12fg = 12*f*g$

$8f + 5g = 12 - 12fg$

$+12fg \qquad +12fg$

$12fg + 8f + 5g = 12$

$-5g \qquad -5g$

$12fg + 8f = 12 - 5g$

$\frac{f(12g+8)}{12g+8} = \frac{12-5g}{12g+8}$

$$\boxed{f = \frac{12-5g}{12g+8}}$$

$\frac{a-3y}{b} \quad \frac{a+y}{8}$

$8(a-3y) = b(a+y)$

$8a - 24y = ab + by$

$+24y \qquad +24y$

$8a = ab + by + 24y$

$-ab \quad -ab$

$a =$

$8a - ab = by + 24y$

$\frac{a(8-b)}{8-b} = \frac{by+24y}{8-b}$

$$\boxed{a = \frac{by+24y}{8-b}}$$

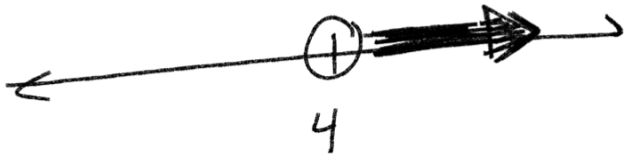
1-4 Solving Inequalities

$> <$

0

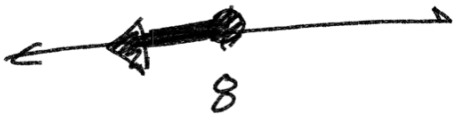
$\geq \leq$

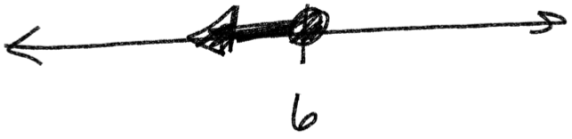
$\boxed{x} > 4$



$8 \geq \boxed{x}$

$x \leq 6$



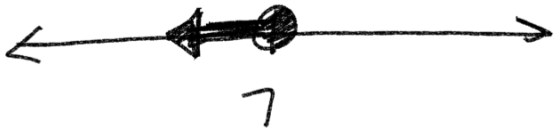


$3(y-5) \leq 6$

$\boxed{y \leq 7}$

$3y - 15 \leq 6$

$+15 \quad +15$



$\frac{3y}{3} \leq \frac{21}{3}$

$3 - 4m < 11$

$-3 \qquad -3$

$-4m < 8$

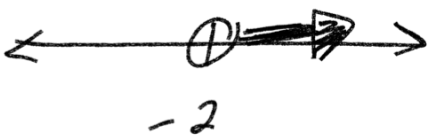
$\frac{-4m}{-4} < \frac{8}{-4}$

$m > -2$

multiply/divide by a negative flip the inequality

$\downarrow$

$m > -2$



$-2(3-h) + 2h \geq 0$

$-6 + 2h + 2h \geq 0$

$\rightarrow \quad 4h - 6 \geq 0$

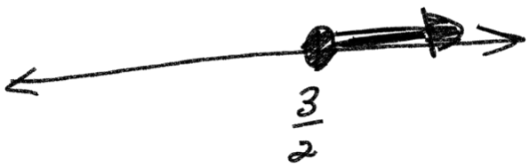
$+6 \quad +6$

$\frac{4h}{4} \geq \frac{6}{4}$

$h \geq \frac{6}{4}$

$h \geq \frac{3}{2}$

$h \geq 1.5$



$5p + 12 \leq 9p - 20$

$-9p \qquad -9p$

$-4p + 12 \leq -20$

$-12 \quad -12$

$\frac{-4p}{-4} \leq \frac{-32}{-4}$

Divided by negative flip inequality

$p \geq 8$

$p \geq 8$

$4 < 1 - 3x < 7$

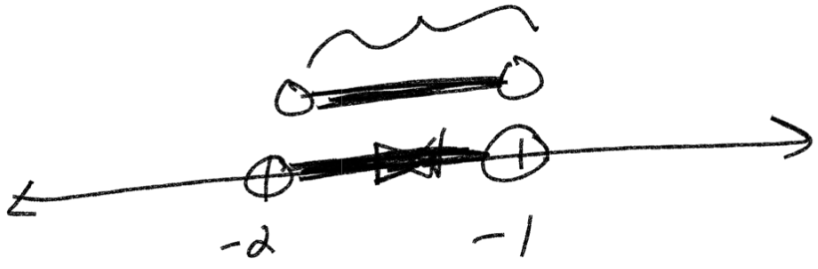
$-1 \quad -1 \quad -1$

$4 < 1 - 3x$

$\frac{3}{-3} < \frac{-3x}{-3} < \frac{6}{-3}$

$-1 > x > -2$

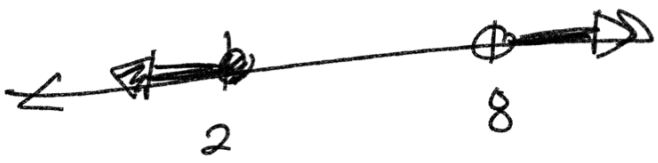
$-1 > x \qquad x > -2$



$\frac{16x}{16} \leq \frac{32}{16}$ or $\frac{-5x}{-5} < \frac{-40}{-5}$ flip inequality

$x \leq 2$ $x > 8$

diverge



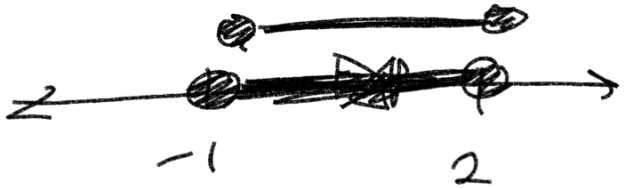
$3x - 5 \geq -8$ and $3x - 5 \leq 1$

$+5 \quad +5$ $+5 \quad +5$

$\frac{3x}{3} \geq \frac{-3}{3}$ $\frac{3x}{3} \leq \frac{6}{3}$

converge

$x \geq -1$ $x \leq 2$



Quiz 2 due today!

HW 1-4 evens

Quiz 3 due Oct 7th

Homework 4 (Fri)

Quiz 4 (Fri) due Oct 14th