Solving Inequations

(back of outline)

1.

a) $5 > 4$ greater than True

c) $15 \geqq 17$ greater than or equal to False

d) $6 < 8$ less than True

e) $7 \leqq -7$ less than or equal to False

$9 - 3 > -2$

2a) $x+2<8$ ((3), 6)

$3+2<8$

$5<8$

b) $-5>x-2$ ((-5), 0)

c) $x+5<7$ (4(1))

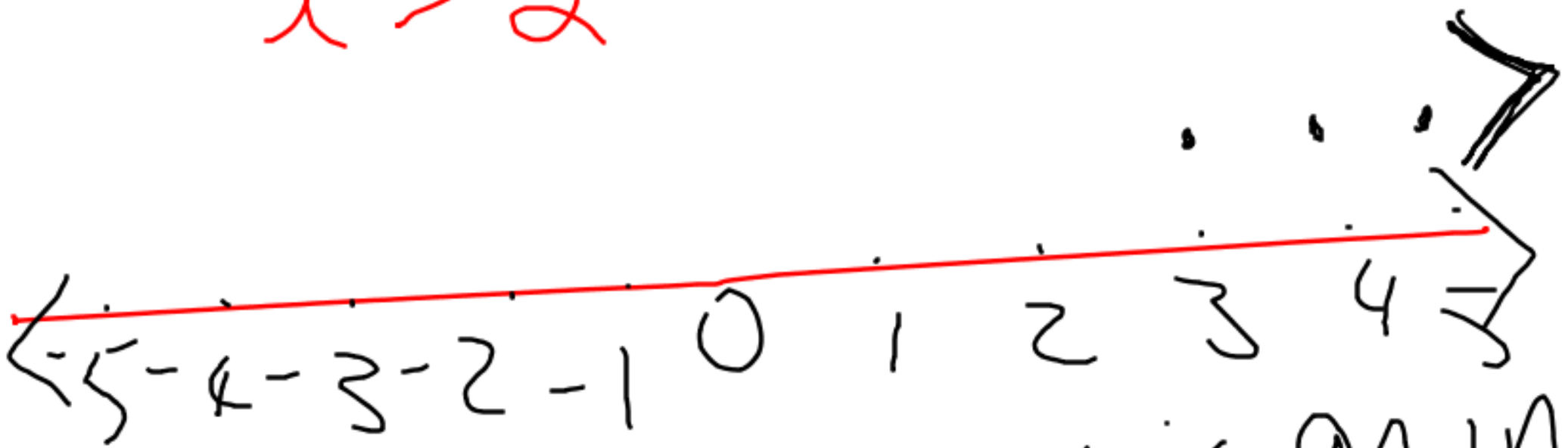
d) $x-3>3$ (0,(8))

e) $x+3\leq 8$ (7,(-1))

3. Solve and Graph

$$x - 2 > 0 \quad \begin{matrix} +2 \\ \cup \\ +2 \end{matrix}$$

$$x > 2$$



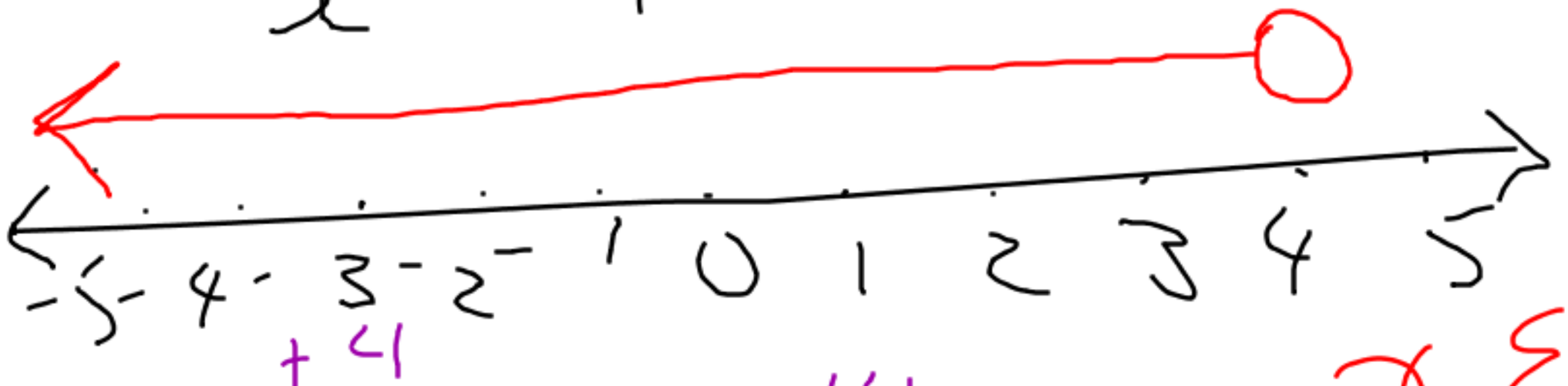
x is an integer

$\{x \in I\}$

5. $x - 3 < 1$ $\quad +3 \quad +3$

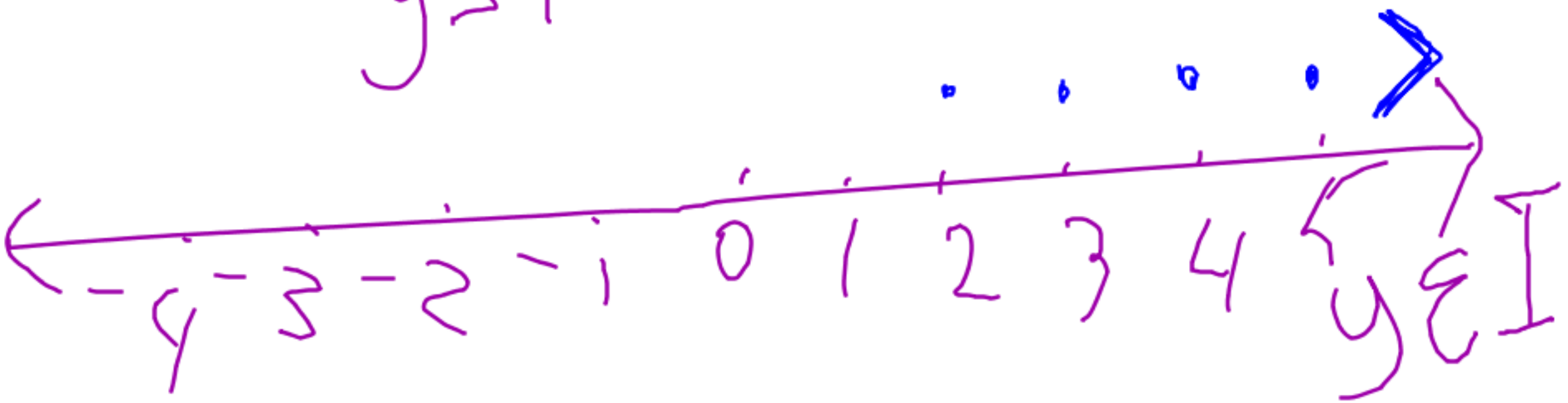
$x \in R$

$x < 4$



7. $y - 4 > -3$ $\quad +4$

$y > 1$

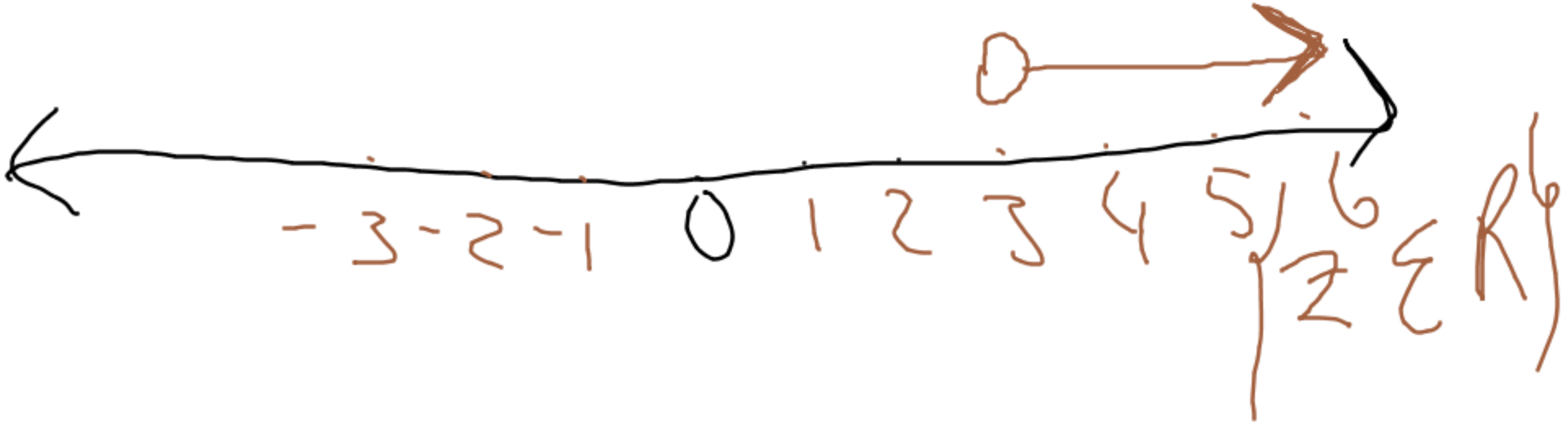


$y \in I$

9. $1 \overset{+2}{<} -2 \overset{+2}{+} z$ $\quad z \in \mathbb{R}$

$3 < z$

$z > 3$



12. $\frac{2y}{2} > \frac{-8}{2}$

$y > -4$

17. $\frac{6p}{6} \leq \frac{-12}{6}$

$p \leq -2$

18. $\frac{-15}{5} \geq \frac{5t}{5}$

$-3 \geq t$

$t \leq -3$

20. $\frac{-3m}{-3} < \frac{9}{-3}$

$m > -3$

When you divide by a negative, change the sign

24. $\frac{-3t}{-3} > \frac{-18}{-3}$

$t < 6$

26. $\frac{21}{-7} \geq \frac{-7x}{-7}$

$-3 \leq x$

$x \geq -3$

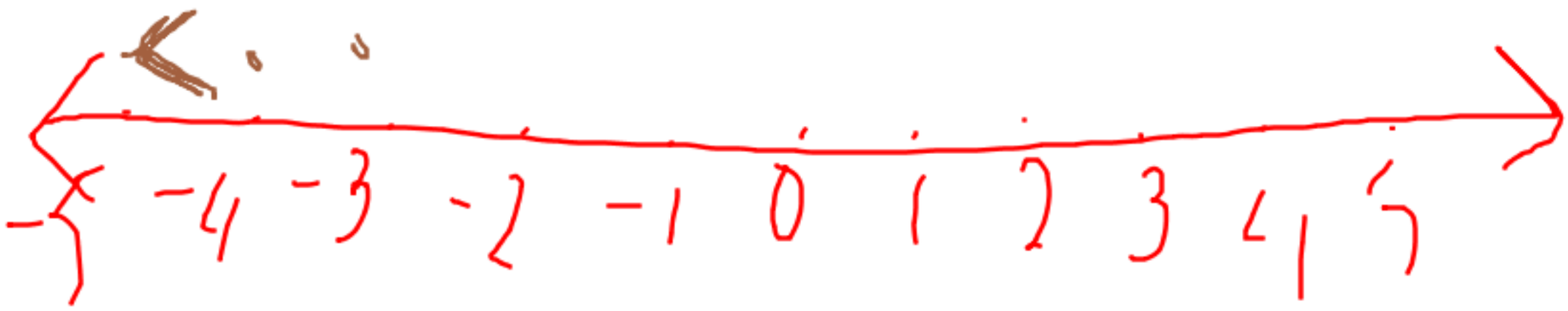
30. Solve + Graph

mEI

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

$$-2 > m$$

$$m < -2$$



Homework: 1) Inequations thru 32

Graph: Integer, Real

↘ 2) Soluing Equations with handout -> finish

3) hand-out 3 questions solving equations with fractions