

ALGEBRA 1
3-2 PRACTICE WORKSHEET

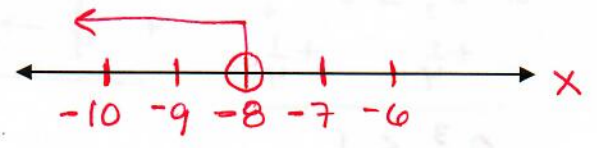
Name KEY
Date _____

Solve and graph each inequality. Use **PROPER FORMATTING!**

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

$$\quad \quad \quad -3 \quad -3$$

$$x < -8$$

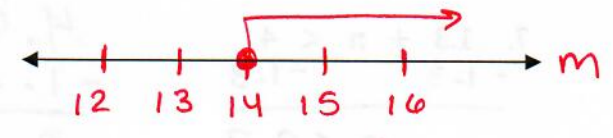


$$2. \quad 2 \leq m - 12$$

$$\quad \quad \quad +12 \quad +12$$

$$14 \leq m$$

$$m \geq 14$$

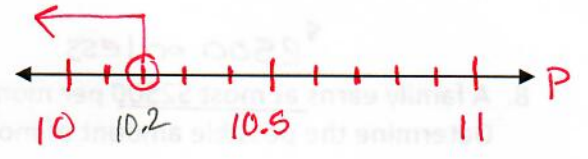


$$3. \quad 6.8 > p - 3.4$$

$$\quad \quad \quad +3.4 \quad +3.4$$

$$10.2 > p$$

$$p < 10.2$$



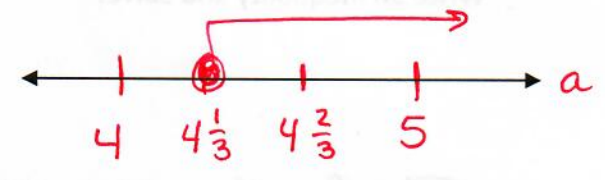
$$4. \quad 5 \leq a + \frac{2}{3}$$

$$\quad \quad \quad -\frac{2}{3} \quad -\frac{2}{3}$$

$$4\frac{1}{3} \leq a$$

$$a \geq 4\frac{1}{3}$$

$$\begin{array}{r} 4 \\ \cancel{5} \frac{3}{3} \\ - \quad \frac{2}{3} \\ \hline 4 \frac{1}{3} \end{array}$$

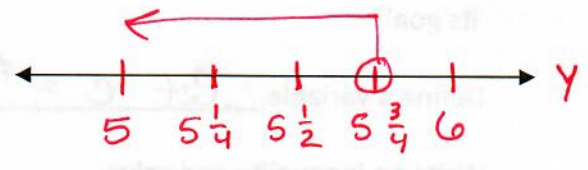


$$5. \quad \frac{1}{4} + y < 6$$

$$\quad \quad \quad -\frac{1}{4} \quad -\frac{1}{4}$$

$$y < 5\frac{3}{4}$$

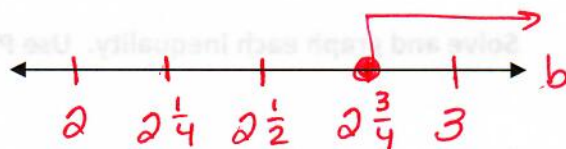
$$\begin{array}{r} 5 \frac{4}{4} \\ \cancel{6} \\ - \quad \frac{1}{4} \\ \hline 5 \frac{3}{4} \end{array}$$



Solve and graph each inequality. Use PROPER FORMATTING!

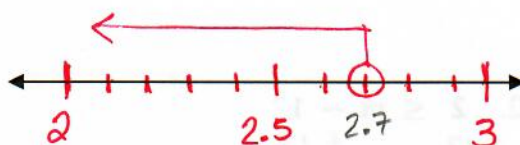
$$\begin{array}{r}
 6. \quad 2\frac{1}{2} \leq b - \frac{1}{4} \\
 + \frac{1}{4} \quad + \frac{1}{4} \\
 \hline
 2\frac{3}{4} \leq b
 \end{array}$$

$$b \geq 2\frac{3}{4}$$



$$\begin{array}{r}
 7. \quad 1.3 + n < 4 \\
 - 1.3 \quad - 1.3 \\
 \hline
 n < 2.7
 \end{array}$$

$$\begin{array}{r}
 4.0 \\
 - 1.3 \\
 \hline
 2.7
 \end{array}$$



\$2500 or less

8. A family earns at most \$2500 per month. The family's monthly expenses are \$2000. Determine the possible amount of money that the family could save each month.

Define a variable. let m = money left to save

Write an inequality and solve.

$$m \leq 2500 - 2000$$

$$m \leq 500$$

The family can save at most \$500.

9. A school is having a canned food drive and wants to collect ^{at least} 1000 canned goods. The school has already collected 400 cans. At least how many more cans does the school need to reach its goal?

Define a variable. let c = # of cans needed to collect

Write an inequality and solve.

$$\begin{array}{r}
 c + 400 \geq 1000 \\
 - 400 \quad - 400 \\
 \hline
 c \geq 600
 \end{array}$$

The school needs to collect at least 600 more cans.