Center #1 – Solve the equation

1. $x - 1 = 8$
2. $m + 7 = 11$
3. $21 = p - 12$
4. $7q = 42$
5. $7k \div 3 = 21$
6. $\frac{5a}{7} = 25$

Center #2 – Write the word sentence as an equation or inequality.

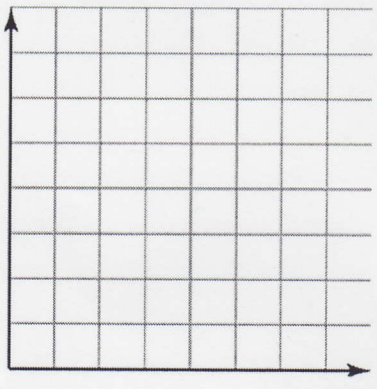
1. The product of a number *m* and 2 is 8.
2. A number *h* is at least 12.
3. 6 less than a number *t* is 7.
4. A number *m* increased by 5 is 7.
5. A number *r* divided by 2 is at most 4.
6. A number y added to 7 is no less than 18.
7. 8 is the quotient of a number *g* and 3.
8. A number c is less than 5.

Center #3 – Tell whether the ordered pair or given value is a solution of the equation or inequality.

1. $y = 3x + 1$; (2, 7)
2. $y = 7x - 4$; (4, 22)
3. $7m < 36$; $m = 5$

4. A taxi is traveling at a rate of 30 miles per hour. Write and graph an equation in two variables that shows the relationship between time (*t*) and distance (*d*) of the taxi. How far does it go in *t* hours?

Equation: _____



Center #4 – Solve the inequality and graph the solution.

1. $x + 1 > 3$

2. $4 \leq n - 4$

3. $s - 15 < 32$

4. $12 + m \geq 29$

Center #5 – Solve the inequality and graph the solution.

1. $9n \geq 63$

2. $21 > \frac{2x}{7}$

3. $24 \geq 3b$

4. $k \div 3 > 15$

Center #6

1. The Golden Gate bridge is about 2700 meters long. The Golden Gate bridge is four-fifths as long as the Coronado bridge. Write and solve an equation to find the length *l* of the Coronado bridge.

2. You want to use a square section of your yard for a garden. You have at most 52 feet of fencing for the garden. Write and solve an inequality to represent the possible lengths of the side of the garden.

Center #1 – Solve the equation

1. $x - 1 = 8$

$+1 \quad +1$

$x = 9$

2. $m + 7 = 11$

$-7 \quad -7$

$m = 4$

3. $21 = p - 12$

$+12 \quad +12$

$33 = p$

4. $7q = 42$

$\frac{7q}{7} = \frac{42}{7}$

$q = 6$

5. $7k \div 3 = 21$

$\times 3 \quad \times 3$

$7k = 63$

$\frac{7k}{7} = \frac{63}{7}$

$k = 9$

6. $\frac{7}{8} \cdot \frac{5a}{7} = \frac{5}{1} \cdot \frac{7}{8}$

$a = 35$

Center #2 – Write the word sentence as an equation or inequality.

1. The product of a number *m* and 2 is 8.

$m \cdot 2 = 8$

2. A number *h* is at least 12.

$h \geq 12$

3. 6 less than a number *t* is 7.

$t - 6 = 7$

4. A number *m* increased by 5 is 7.

$m + 5 = 7$

5. A number *r* divided by 2 is at most 4.

$\frac{r}{2} \leq 4$

6. A number y added to 7 is no less than 18.

$7 + y \geq 18$

7. 8 is the quotient of a number *g* and 3.

$8 = g \div 3$

8. A number c is less than 5.

$c < 5$

Center #3 – Tell whether the ordered pair or given value is a solution of the equation or inequality.

1. $y = 3x + 1$; (2, 7)

$7 = 3(2) + 1$

$7 = 6 + 1$

$7 = 7$ yes

2. $y = 7x - 4$; (4, 22)

$22 = 7(4) - 4$

$22 = 28 - 4$

$22 = 24$

NO

3. $7m < 36$; $m = 5$

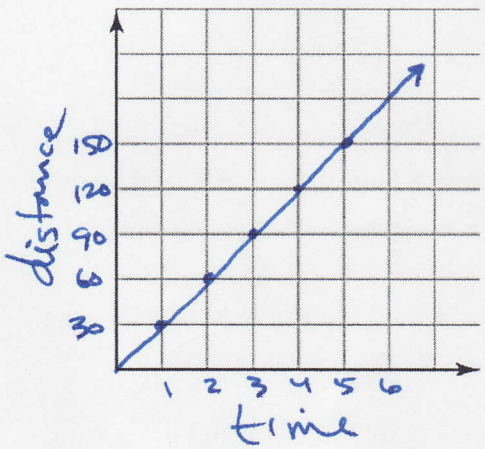
$7 \cdot 5 < 36$

$35 < 36$

yes

4. A taxi is traveling at a rate of 30 miles per hour. Write and graph an equation in two variables that shows the relationship between time (*t*) and distance (*d*) of the taxi. How far does it go in *t* hours?

Equation: $d = 30t$



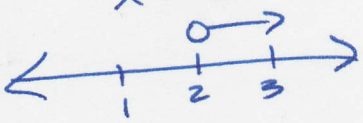
Math 6 Ch 7 p348 #1-7all, 10-12all, 15-21all

Center #4 – Solve the inequality and graph the solution.

1. $x + 1 > 3$

$-1 \quad -1$

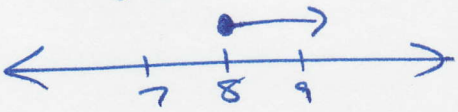
$x > 2$



2. $4 \leq n - 4$

$+4 \quad +4$

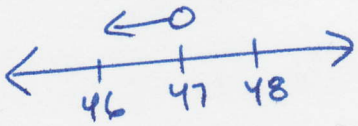
$8 \leq n$



3. $s - 15 < 32$

$+15 \quad +15$

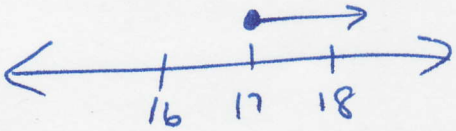
$S < 47$



4. $12 + m \geq 29$

$-12 \quad -12$

$m \geq 17$

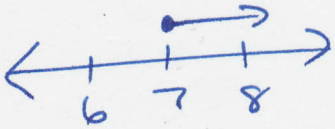


Center #5 – Solve the inequality and graph the solution.

1. $9n \geq 63$

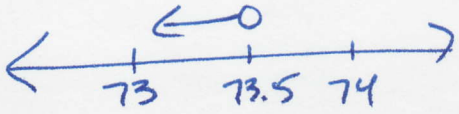
$\frac{9}{9} \quad \frac{9}{9}$

$n \geq 7$



2. $\frac{2}{2} \cdot 21 > \frac{2x}{1} \cdot \frac{1}{2}$

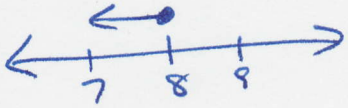
$73.5 > x$



3. $24 \geq 3b$

$\frac{24}{3} \geq \frac{3b}{3}$

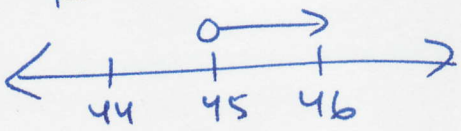
$8 \geq b$



4. $k \div 3 > 15$

$\times 3 \quad \times 3$

$k > 45$



Center #6

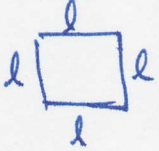
1. The Golden Gate bridge is about 2700 meters long. The Golden Gate bridge is four-fifths as long as the Coronado bridge. Write and solve an equation to find the length *l* of the Coronado bridge.

$\frac{2700}{\frac{4}{5}} = \frac{\frac{4}{5}C}{\frac{4}{5}}$

$C = 2700 \div \frac{4}{5}$

$\frac{2700}{1} \cdot \frac{5}{4} = 3375\text{ m}$

2. You want to use a square section of your yard for a garden. You have at most 52 feet of fencing for the garden. Write and solve an inequality to represent the possible lengths of the side of the garden.



$l + l + l + l \leq 52$

$\frac{4l}{4} \leq \frac{52}{4}$

$l \leq 13\text{ ft.}$