

Center #1 – Simplify the expressions.

1) $2a - 7 + 8b - 4 + 3a$

2) $-1.5(1 - 2n) + 2.5 - 7n$

3) $(2x - 6) - (x - 3)$

4) $\frac{2}{5}(d - 10) + \frac{2}{3}(d + 6)$

5) $(4a - 3) - 3(5 - 2a)$

Center #2 – Write each word sentence as an equation or inequality and solve.

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 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 #3 – Factor out the coefficient of the variable.

1) $2b + 8$

2) $-5q + 20$

3) $\frac{2}{3}a + \frac{1}{2}$

4) $-0.5r - 6$

Center #4 – Solve the equation.

1) $-2 + j = -22$

2) $|t| - 3.7 = 2.2$

3) $5.4x = -32.4$

4) $\frac{p}{5} = -10$

5) $\frac{w}{6} + \frac{5}{8} = -1\frac{3}{8}$

6) $3(3w - 4) = -20$

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

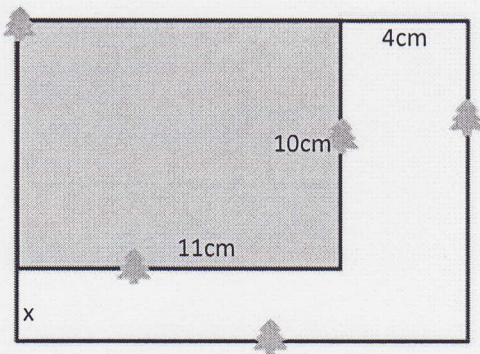
1) $8n + 4 \geq 64$

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

3) $-24 \geq 3b - 6$

4) $\frac{3}{11}k > 15$

Center #6



Write an expression in simplest form that represents the area of the white space.

Center #1 - Simplify the expressions.

1) $2a + 7 + 8b - 4 + 3a$

$5a + 8b - 11$

or

$5a + 8b + -11$

2) $-1.5(1-2n) + 2.5 - 7n$

$-1.5 + 3n + 2.5 - 7n$

$-4n + 1$

3) $(2x-6)-(x-3)$

$2x - 6 - x + 3$

$x - 3$

or

$x + -3$

4) $\frac{2}{5}(d-10) + \frac{2}{3}(d+6)$

$\frac{2}{5}d - 4 + \frac{2}{3}d + 4$

$\frac{6}{15}d + \frac{10}{15}d$

$\frac{16}{15}d = 1\frac{1}{15}d$

5) $(4a-3)-3(5-2a)$

$4a - 3 - 15 + 6a$

$10a - 18$

or

$10a + -18$

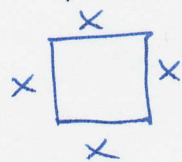
Center #2 - Write each word sentence as an equation or inequality and solve.

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 of the Coronado bridge.

$\frac{4}{5} \cdot \frac{4}{5}x = \frac{2700}{1} \cdot \frac{5}{4}$

$x = 3375 \text{ meters}$

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.



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

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

Center #3 - Factor out the coefficient of the variable.

1) $2b + 8$

$2(b + 4)$

2) $-5q + 20$

$-5(q - 4)$

3) $\frac{2}{3}a + \frac{1}{2}$

$\frac{1}{2} \cdot \frac{3}{2} = \frac{3}{4}$

$\frac{2}{3}(a + \frac{3}{4})$

4) $-0.5r - 6$

$-0.5(r + 12)$

Unit 6 NCC Cr 7/13 P318 #11-19 odd, 20: P392 #1-9 odd, 10-16 odd, 18-20 odd

Center #4 - Solve the equation.

1) $-2 + j = -22$
 $\frac{-2 + j}{+2 \quad +2} = \frac{-22}{+2}$
 $j = -20$

2) $|t| - 3.7 = 2.2$
 $\frac{|t| - 3.7}{+3.7 \quad +3.7} = \frac{2.2}{+3.7}$
 $|t| = 5.9$
 $t = 5.9 \text{ or } -5.9$

3) $5.4x = -32.4$
 $\frac{5.4x}{5.4} = \frac{-32.4}{5.4}$
 $x = -6$

4) $5 \cdot \frac{p}{5} = -10 \cdot 5$
 $p = -50$

5) $\frac{w}{6} + \frac{5}{8} = -1 \frac{3}{8}$
 $\frac{w}{6} + \frac{5}{8} - \frac{5}{8} = -1 \frac{3}{8} - \frac{5}{8}$
 $\frac{w}{6} = -2 \cdot 6$
 $w = -12$

6) $3(3w - 4) = -20$
 $9w - 12 = -20$
 $\frac{9w - 12}{+12 \quad +12} = \frac{-20}{+12}$
 $9w = -8$
 $w = -\frac{8}{9}$

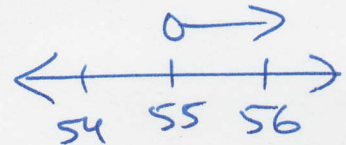
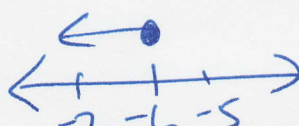
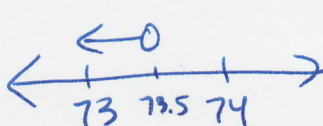
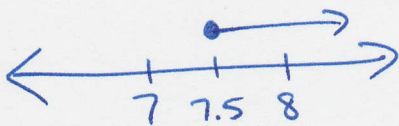
Center #5 - Solve the inequality and graph the solution.

1) $8n + 4 \geq 64$
 $\frac{8n + 4}{-4 \quad -4} \geq \frac{64}{-4}$
 $8n \geq 60$
 $\frac{8n}{8} \geq \frac{60}{8}$
 $n \geq 7.5$

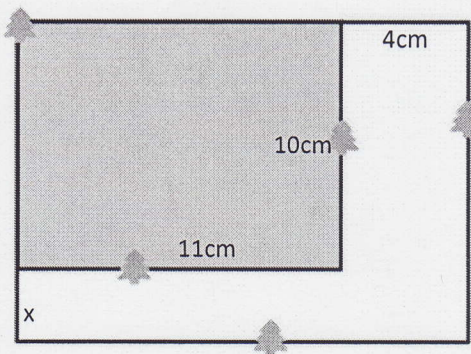
2) $27.21 > \frac{2x}{7} \cdot \frac{1}{2}$
 $\frac{147}{2} > x$
 $73.5 > x$

3) $-24 \geq 3b - 6$
 $\frac{-24}{+6} \geq \frac{3b - 6}{+6}$
 $-\frac{18}{3} \geq \frac{3b}{3}$
 $-6 \geq b$

4) $\frac{3}{5}k > 15 \cdot \frac{11}{3}$
 $k > 55$



Center #6



Write an expression in simplest form that represents the area of the white space.

Big rectangle $(11+4) \times (10+x)$
 $15(10+x)$
 $15x + 150$

Small $11 \times 10 = 110$

$15x + 150 - 110$

$15x + 40$