Center #1 – Simplify the expressions.

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

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 Coronado bridge is about 2700 meters long. The Coronado bridge is four-fifths as long as the Golden Gate bridge. Write and solve an equation to find the length of the Golden Gate 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) $\frac{w}{6}+\frac{5}{8}=-1\frac{3}{8}$

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

4) $5.4x=-32.4$

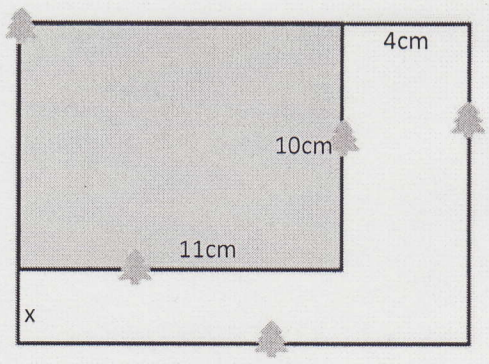
Center #5 – Solve the inequality and graph the solution.

1) $-24 \geq 3b-6$

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

3. $\frac{3}{11}k > 15$

Center #6



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

Center #1 – Simplify the expressions.

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

$8a^2+5a-11$

or

$8a^2+5a+-11$

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 $10a+-18$

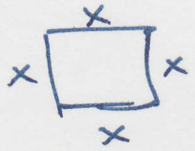
Center #2 – Write each word sentence as an equation or inequality and solve.

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

$\frac{5}{4}\cdot 2700 = \frac{4}{5}g\cdot\frac{5}{4}$

$g = 3375$ 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.



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

$x \le 13$ ft.

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

1) $2b+8$

$2\cdot b+2\cdot 4$

$2(b+4)$

2) $-5q+20$

$-5\cdot q+-5\cdot -4$

$-5(q+-4)$

3) $\frac{2}{3}a+\frac{1}{2}$ $\quad \frac{3}{2}\cdot\frac{2}{3}\cdot x = \frac{1}{2}\cdot\frac{3}{2}$

$x=\frac{3}{4}$

$\frac{2}{3}\cdot a+\frac{2}{3}\cdot\frac{3}{4}$

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

4) $-0.5r-6$

$-0.5\cdot r--0.5\cdot -12$

$-0.5(r--12)$

$-0.5(r+12)$

Math 6 Acc ch 7/13 p348 #11-19 odd, 20 p392 #1-9 odd, 10-16 all, 18-20 all

Center #4 – Solve the equation.

1) $-2 + j = -22$

$+2 \quad +2$

$j = -20$

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

$-\frac{5}{8} \quad -\frac{5}{8}$

$6 \cdot \frac{w}{6} = -2 \cdot 6$

$w = -12$

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

$9w - 12 = -20$

$+12 \quad +12$

$\frac{9w}{9} = \frac{-8}{9}$

$w = -\frac{8}{9}$

4) $5.4x = -32.4$

$\frac{5.4}{5.4} \quad \frac{5.4}{5.4}$

$x = -6$

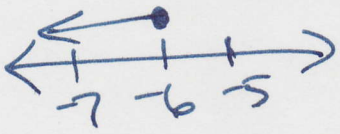
Center #5 – Solve the inequality and graph the solution.

1) $-24 \geq 3b - 6$

$+6 \quad +6$

$\frac{-18}{3} \geq \frac{3b}{3}$

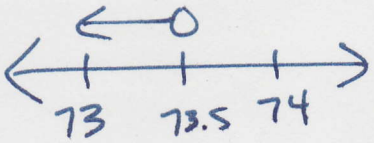
$-6 \geq b$



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

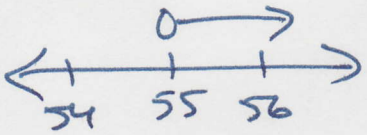
$\frac{147}{2} > x$

$73.5 > x$

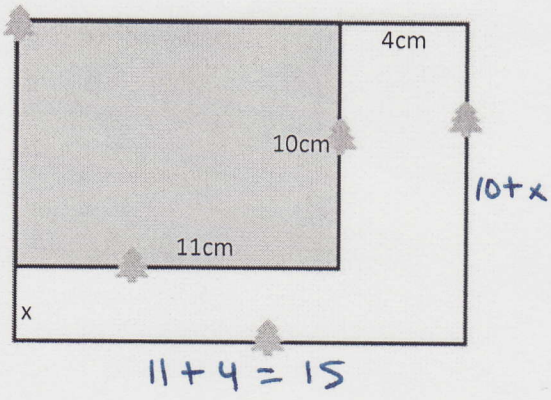


$\frac{3}{3} \cdot \frac{3}{11} k > \frac{5}{15} \cdot \frac{11}{3}$

$k > 55$



Center #6



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

Big rectangle $(11+4)(10+x)$

$15(10+x)$

$150 + 15x$

Small $10 \times 11 = 110$

$15x + 150 - 110$

$\boxed{15x + 40}$