Feb. 13th Problems

Solve each proportion.

1) $-\frac{4x}{7} = \frac{x-2}{11}$

2) $-\frac{n}{7n+7} = \frac{7}{2}$

Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

3) $(-1, 5),\ (-5, -1)$

4) $(-1, 8),\ (7, 2)$

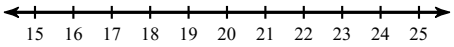
Factor each completely.

5) $7n^2 + 16n + 4$

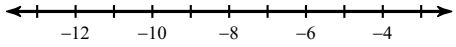
6) $3n^2 + 26n - 40$

Solve each inequality and graph its solution.

7) $-112 \geq -4(r + 10)$



8) $-9 + \frac{n}{6} > -10$



Solve each proportion.

9) $\frac{11x + 9}{x} = \frac{2}{10}$

10) $-\frac{2}{4} = \frac{k}{k-10}$

11) $\frac{a-7}{3} = \frac{a}{6}$

12) $\frac{x}{11} = \frac{x-1}{5}$

Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

13) $(4, 5),\ (-7, -4)$

14) $(-5, -3),\ (6, 2)$

Factor each completely.

15) $5x^2 - 22x - 15$

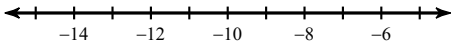
16) $5x^2 - 12x + 4$

17) $7r^2 - 20r + 12$

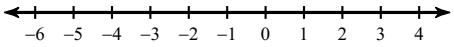
18) $3x^2 - 2x - 21$

Solve each inequality and graph its solution.

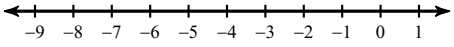
19) $-4(4k - 5) > 148$



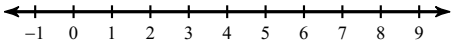
20) $-8 + 6(7 - 5p) \leq 94$



21) $-139 \leq 5(7a - 3) - 4a$



22) $-121 > -6r + 5(1 - 3r)$



Answers to Feb. 13th Problems (ID: 1)

1) $\left\{\frac{14}{51}\right\}$

2) $\left\{-\frac{49}{51}\right\}$

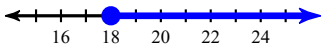
3) 7.2

4) 10

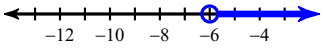
5) $(7n+2)(n+2)$

6) $(3n-4)(n+10)$

7) $r \geq 18$:



8) $n > -6$:



9) $\left\{-\frac{5}{6}\right\}$

10) $\left\{\frac{10}{3}\right\}$

11) $\{14\}$

12) $\left\{\frac{11}{6}\right\}$

13) 14.2

14) 12.1

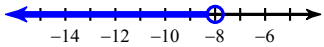
15) $(5x+3)(x-5)$

16) $(5x-2)(x-2)$

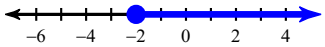
17) $(7r-6)(r-2)$

18) $(3x+7)(x-3)$

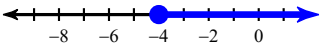
19) $k < -8$:



20) $p \geq -2$:



21) $a \geq -4$:



22) $r > 6$: