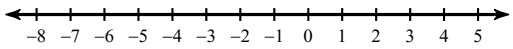
SM2a HW #3-2 (divide radicals)

Solve each compound inequality and graph its solution.

1) $m + 9 < 13$ and $-6 + m \geq -11$



Simplify.

2) $\dfrac{\sqrt{15}}{5\sqrt{4}}$

3) $\dfrac{3\sqrt{16}}{5\sqrt{25}}$

4) $\dfrac{4\sqrt{2}}{5\sqrt{32}}$

5) $\dfrac{5\sqrt{5}}{5\sqrt{45}}$

6) $\dfrac{5\sqrt{5}}{4\sqrt{16}}$

7) $\dfrac{5\sqrt{6}}{4\sqrt{25}}$

8) $\sqrt{24m}$

9) $\sqrt{48b}$

10) $-2\sqrt{27} - 2\sqrt{18} - 3\sqrt{27}$

11) $-2\sqrt{5}\left(4 + \sqrt{2}\right)$

Factor each completely.

12) $n^2 - n - 20$

13) $3m^3 + 3m^2 - 36m$

Simplify. Your answer should contain only positive exponents.

14) $3m^{-1}n^3 \cdot 2m^4n^3 \cdot 2m^{-2}n^{-3}$