

Algebra II Homework #1

- 1) $\sqrt{7}$ belongs to which number groups?
- 2) Graph $\{x \mid -3 < x \leq 5\}$ on a number line.
- 3) Simplify: $\frac{5}{24} - \frac{1}{18}$
- 4) Simplify: $\frac{48}{72} \cdot \frac{98}{686} \div \frac{108}{84}$
- 5) Simplify: $-3^2 - (-1-1)^4 + 18 \div 6(-2-1) - 7^0$
- 6) $\frac{5}{8}$ belongs to which number groups?
- 7) Graph $\{x \mid x < \frac{-3}{5}\}$ on a number line.
- 8) Simplify: $\frac{24}{81} (\frac{5}{8} - \frac{1}{12}) - \frac{7^0}{9}$
- 9) Simplify: $-(-1-2)^3 - 8^0 - 12 \div 6(-1-1) - 1^9$
- 10) Simplify: $|-6+2| - |-3-1| - 2|-7|$
- 11) Simplify: $-[-3(-2-1) - 2^3 + 15 \div 5(-2-1)]^2 - 9^0$
- 12) Simplify: $\frac{54}{48} (\frac{7}{27} - \frac{5}{36}) \div \frac{104}{64}$
- 13) Simplify: $-|-3-5|^0 + 2|-4-1| - 5|-1|^3$
- 14) -4 belongs to which number groups?
- 15) Simplify: $6 \div 2(5-2) - |-7+2| - 3^2 - (-2-1)^0$
- 16) Graph $\{x \mid \frac{-2}{7} \leq x < \frac{5}{6}\}$ on a number line.
- 17) Simplify: $-1^8 - (-5-2)^0 - 21 \div 7(-2-1) - |-3+1|$
- 18) Simplify: $(\frac{81}{108} \div \frac{12^2}{24})^2 - \frac{936}{169} (\frac{5}{36} - \frac{1}{54})$
- 19) Simplify: $-|-4+1|^2 - 3|-1-2| - 5|-3-1|^0$
- 20) Simplify: $-81 \div 9(-2-1) \div 3(-1-1)^3 \div 2 - |-4+3|$

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