

SM2a HW #5-6 (Take Square roots)

Date _____ Period _____

Find the "zeroes" of the equations by finding square roots.

1) $y = x^2 - 24$

2) $y = x^2 - 76$

3) $y = x^2 - 81$

4) $y = x^2 + 86$

5) $y = 3x^2 - 48$

6) $y = 2x^2 - 32$

7) $y = 2x^2 + 16$

8) $y = 5x^2 - 225$

Simplify.

9) $-\sqrt{15}(4 + \sqrt{3})$

10) $2\sqrt[3]{2} + 2\sqrt[3]{4} + 2\sqrt[3]{-32}$

11) Convert the following power to a radical.

$$5 \cdot (3x^2)^{\frac{1}{4}}$$

12) What is the equation of a line through: $(5, 7)$ and perpendicular to the line $y = \frac{2}{3}x - 5$

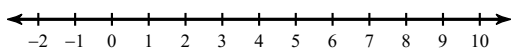
13) What is the equation of a line through: $(-2, 3)$ and perpendicular to the line $y = \frac{4}{5}x - 1$

Solve each equation.

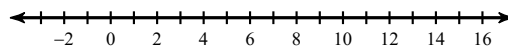
14) $|-4 + x| = 9$

Write the equivalent compound inequality then graph it.

15) $|b - 5| > 1$



16) $|p - 6| \leq 7$



17) What does "the absolute value of 5" mean? Use distance in your explanation.