

# Ch. 28 - BOARD PROBLEMS

1) FIND THE COMMON RATIO, 8<sup>th</sup> term, AND THE FORMULA

a)  $2, \frac{1}{2}, \frac{1}{8}, \frac{1}{32}$       b)  $.75, 3, 12, 48$

FIND THE COMMON RATIO, 1<sup>st</sup> Term, and  $a_{11}$

c)  $a_n = -3\left(\frac{1}{2}\right)^{n-1}$       d)  $a_n = -1.5(-2)^{n-1}$

FIND THE MISSING TERMS.

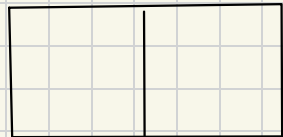
e)  $\dots, 4, \_, \_, 108, \dots$       f)  $\dots, 25, \_, \_, \_, -\frac{1}{25}, \dots$

Compute the series.

g)  $\sum_{m=1}^{10} -2 \cdot 2^{m-1}$

h)  $\sum_{k=1}^8 32 \cdot \left(\frac{1}{2}\right)^{k-4}$

FIND THE MAXIMUM AREA OF A RECTANGULAR GARDEN BED CUT WITH ONE DIVIDER IF THE MAXIMUM LENGTH OF LUMBER IS 1200ft.



# Ch. 29 - RADICALS & ABSOLUTE VALUE.

EX. 1

$$|x| = 3$$

WHAT ARE THE POSSIBLE SOLUTIONS?

EX. 2

$$|x+1| = 5$$

$$x+1 = \underline{\quad}$$

SOLVE 2 EQUATIONS

FAIRNESS RULE TO SOLVE EQUATIONS WITH RADICALS.

IF  $A = B$ , THEN  $A^x = B^x$

EX. 3

$$\sqrt{x} = 2$$

: NEXT STEP? \_\_\_\_\_

EX. 4

$$\sqrt{x+1} = 2$$

EX. 5

$$\sqrt{x+1} - 2 = 3$$

step 1: \_\_\_\_\_

EX. 6

$$\sqrt[3]{x-2} = -2$$

EX. 7

$$\sqrt[4]{2x + 41} = 3$$

EX. 8

EXTRANEOUS SOLUTIONS ARE POSSIBLE  
SO ALWAYS CHECK WHEN YOU HAVE  
2 SOLUTIONS.

$$\sqrt{2x-1} - 2 = -\sqrt{x}$$

EX. 9

$$\text{SOLVE } |x+3| = -2$$

PRACTICE PROBLEMS Ch.28

$$\textcircled{1} |x+7| = 5$$

$$\textcircled{2} \sqrt{x-1} + 5 = 10$$

$$\textcircled{3} \sqrt[3]{x-2} - 9 = -7$$

$$\textcircled{4} \sqrt{2x-2} - 1 = \sqrt{3x}$$

$$\textcircled{5} \sqrt[3]{x+1} + 8 = 15$$