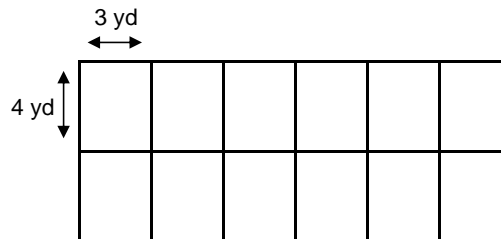


PROBLEM OF THE WEEK - 1

JOE'S GARDEN

1. JOE WANTS TO SEPARATE HIS GARDEN INTO 12 CONGRUENT INDIVIDUAL PLOTS WITH ROPE AS SHOWN IN THE FIGURE. HOW MUCH ROPE WILL JOE NEED?
2. IF JOE ONLY DIVIDES THE GARDEN INTO 6 CONGRUENT RECTANGLES, HOW MUCH ROPE WILL HE **NOT** NEED (SAVE)?
3. IF THE ROPE COST \$1 PER FOOT, HOW MUCH MONEY WILL JOE SAVE IF HE SEPARATES THE GARDEN INTO 6 SECTIONS?

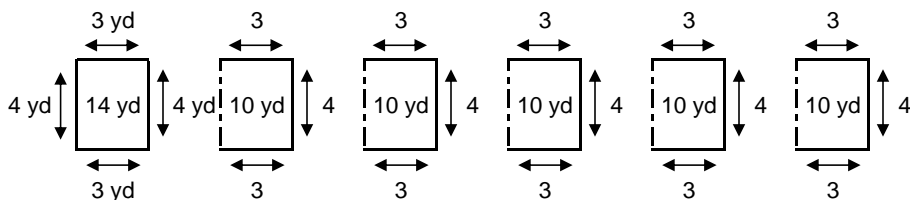


HELP:
 yd = yard
 3 feet = 1 yard

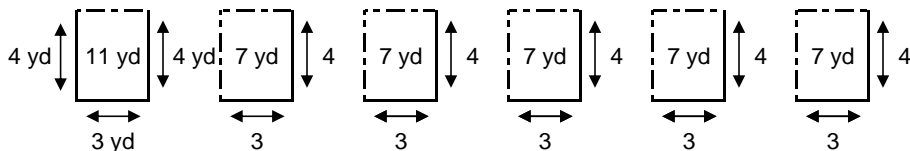
PROBLEM OF THE WEEK - ANSWER AND HELP

PART ONE

JOE WANTS TO SEPARATE HIS GARDEN INTO 12 CONGRUENT INDIVIDUAL PLOTS WITH ROPE AS SHOWN IN THE FIGURE. HOW MUCH ROPE WILL JOE NEED?



AFTER HE ROPES OFF THE FIRST SECTION HE WILL NOT NEED TO USE ROPE ON THE LEFT SIDE OF THE NEXT SECTIONS.

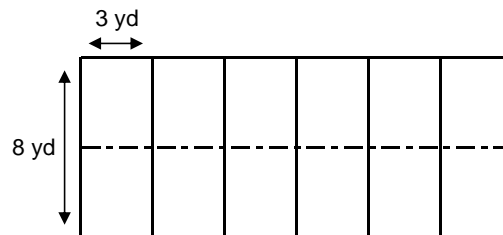


ANSWER:
 14
 50 (5 x 10)
 11
+ 35 (5 x 7)
 110 YARDS

ON THE LOWER RECTANGLES THE UPPER SECTIONS HAVE ALREADY BEEN ROPED OFF. IN ADDITION, AFTER HE ROPES OFF THE FIRST SECTION HE WILL NOT NEED TO USE ROPE ON THE LEFT SIDE (LIKE ABOVE).

PART TWO

IF JOE ONLY DIVIDES THE GARDEN INTO 6 CONGRUENT RECTANGLES, HOW MUCH ROPE WILL HE NOT NEED (SAVE)?



IF YOU LOOK CLOSELY JOE WILL NEED TO ROPE THE SAME WAY EXCEPT FOR THE MIDDLE SECTION. 3 YARDS x 6 SECTIONS = 18 YARDS LESS ROPE.

PART THREE

IF THE ROPE COST \$1 PER FOOT, HOW MUCH MONEY WILL JOE SAVE IF HE SEPARATES THE GARDEN INTO 6 SECTIONS?

JOE WAS USING YARDS NOT FEET, SO FIRST YOU NEED TO CONVERT TO YARDS. \$1 PER FOOT x 3 = \$3 PER YARD. THEN MULTIPLY \$3 x 18 = \$54 SAVED.