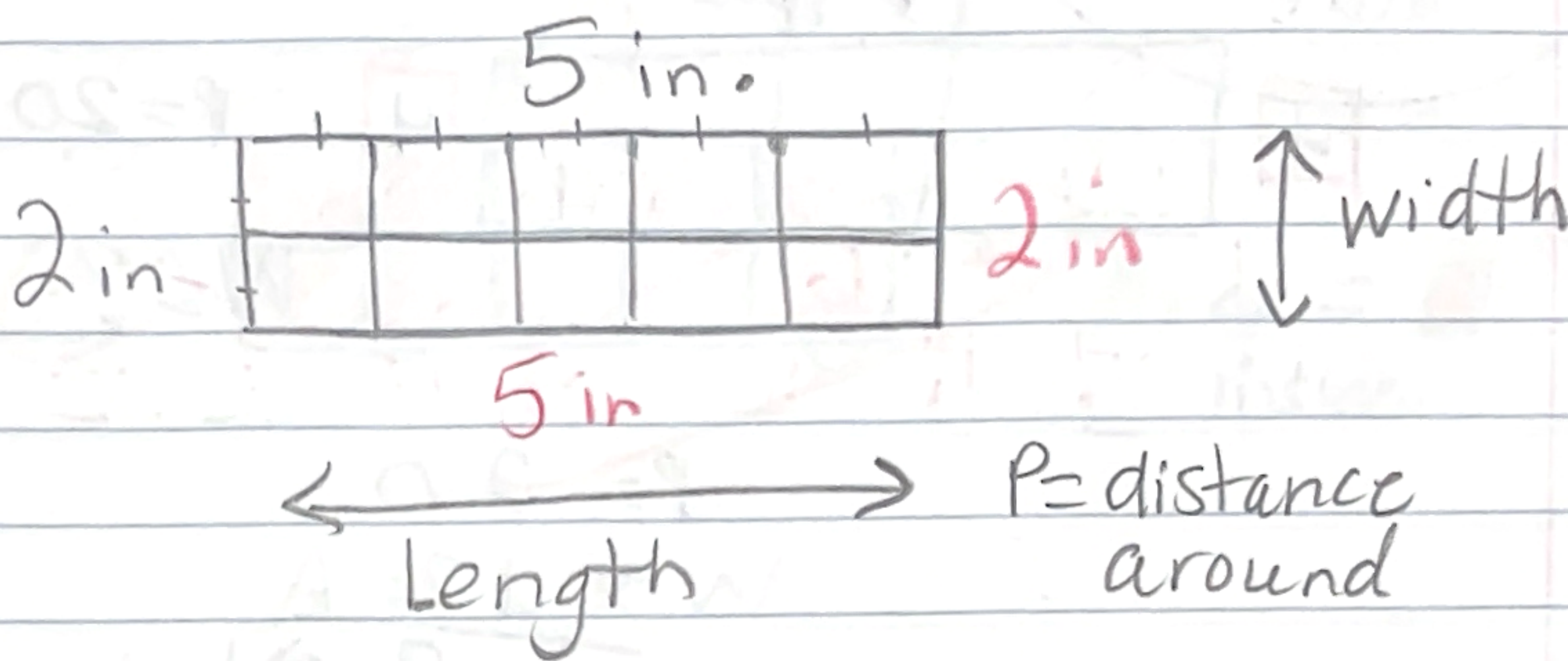


Ch. 6 Perimeter

12/2/24

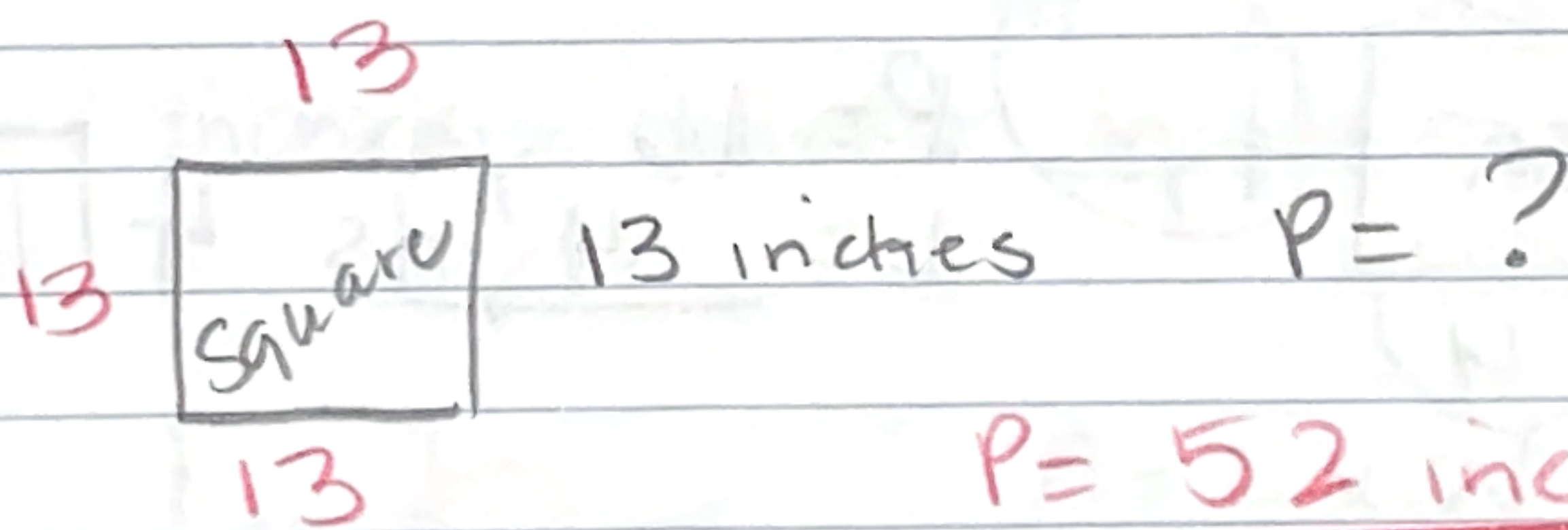


$$\text{Perimeter} = 2L + 2W$$

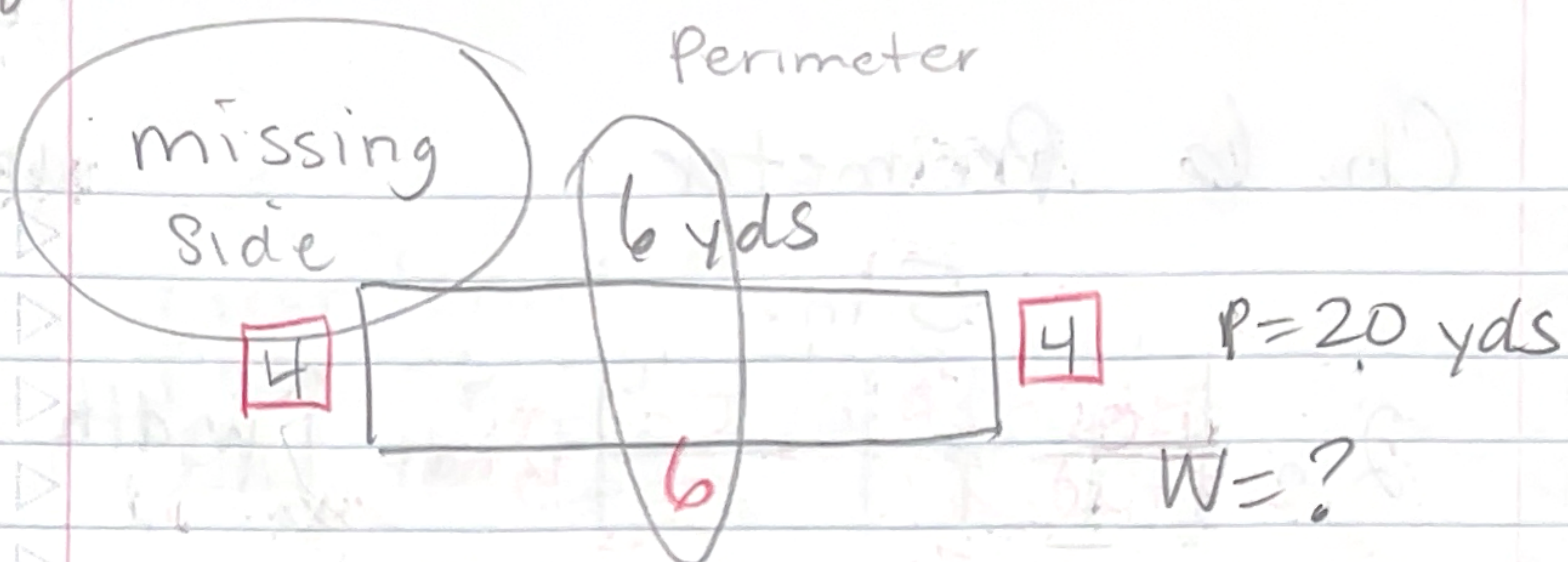
$$P = (2 \times 5) + (2 \times 2)$$

$$P = 10 + 4$$

$$P = \underline{14 \text{ inches}}$$



$$\underline{P = 52 \text{ inches}}$$

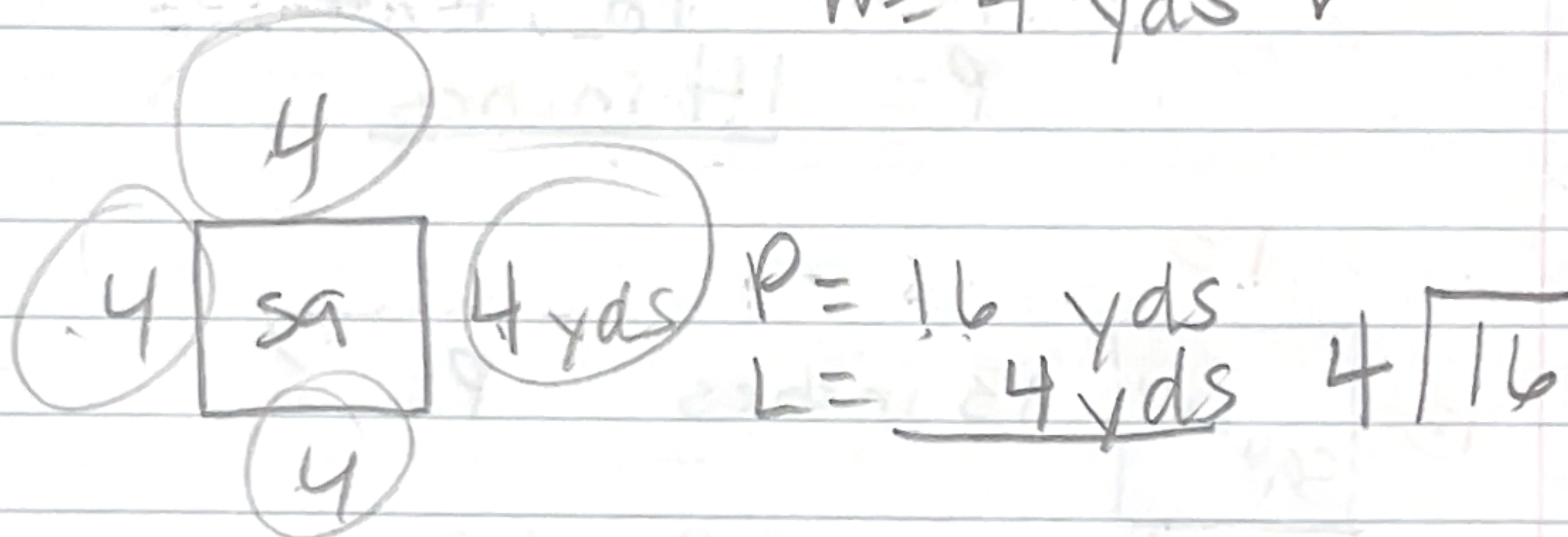


$$P = 20$$

$$- 12$$

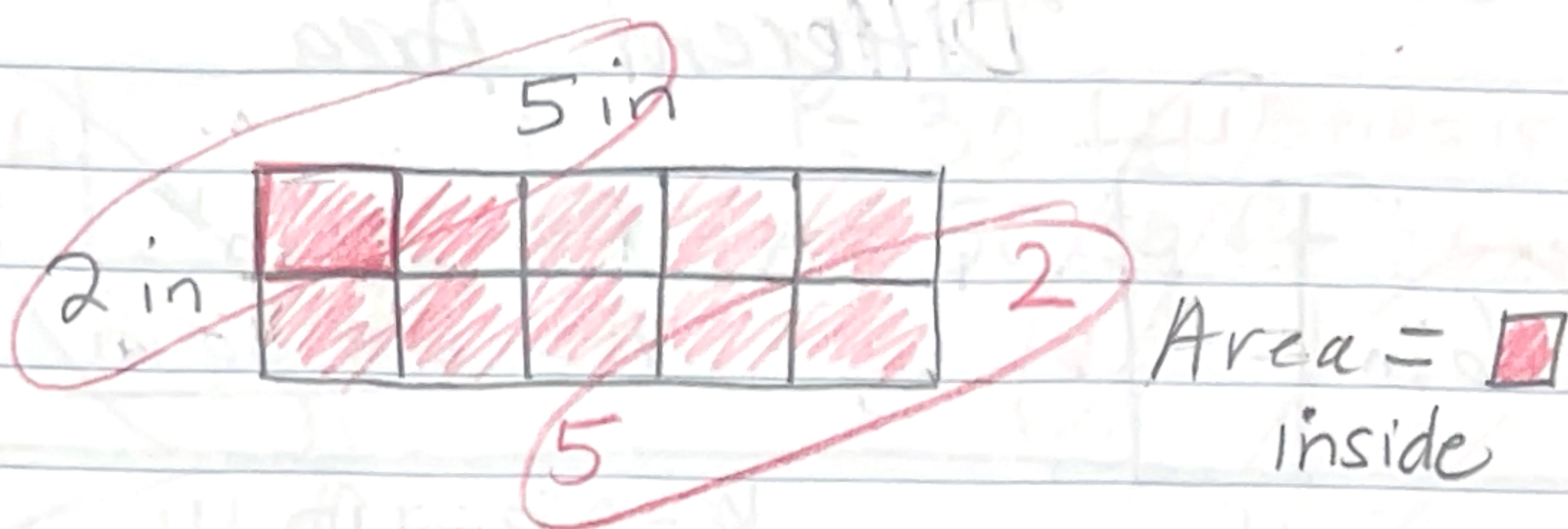
$$\frac{8}{2} \rightarrow \text{both widths}$$

$$W = 4 \text{ yds} \checkmark$$



12/3/24

Ch. 6 Area



$$A = L \times W$$

or

$$A = B \times H$$

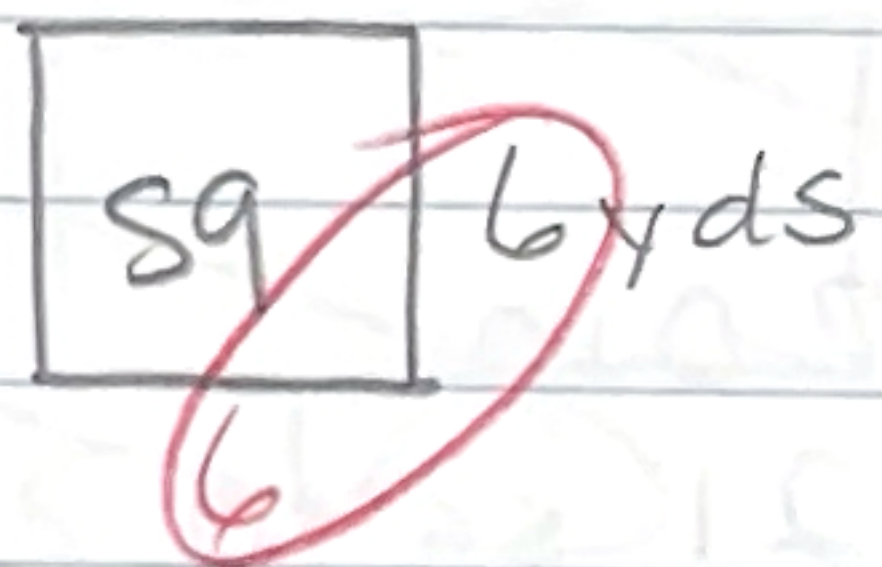
$$A = 5 \text{ in} \times 2 \text{ in}$$

$$A = 10 \text{ inches squared}$$

sq in

in²

inches x inches = inches sq.



$$A = L \times W$$

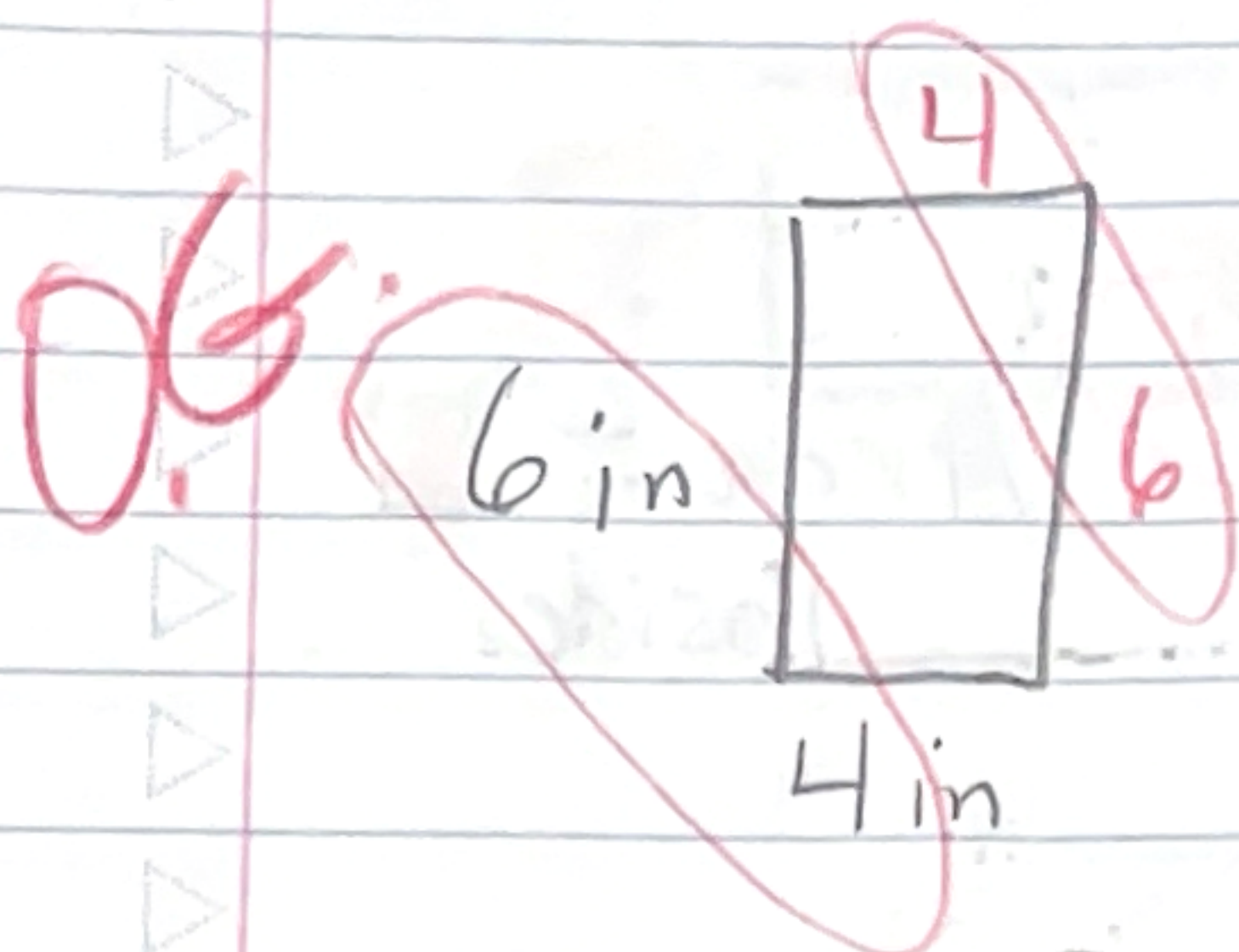
$$A = 6 \times 6$$

$$A = 36 \text{ yds sq.}$$

Area is
ALWAYS
squared

70

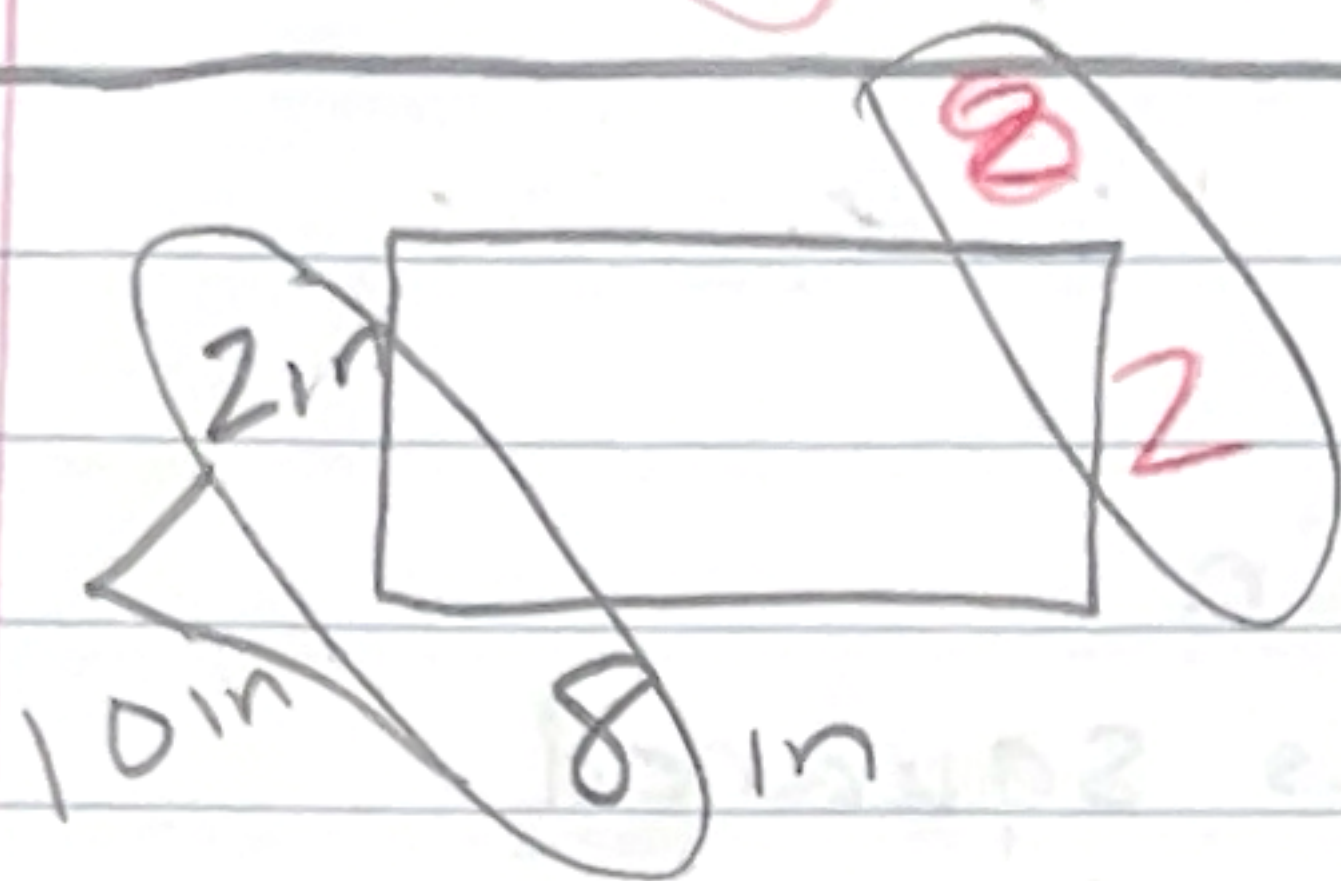
12/4/24 Ch. 6 Same Perimeter Different Area



$$P = 20 \text{ in} \checkmark$$

$$A = 24 \text{ sq in}$$

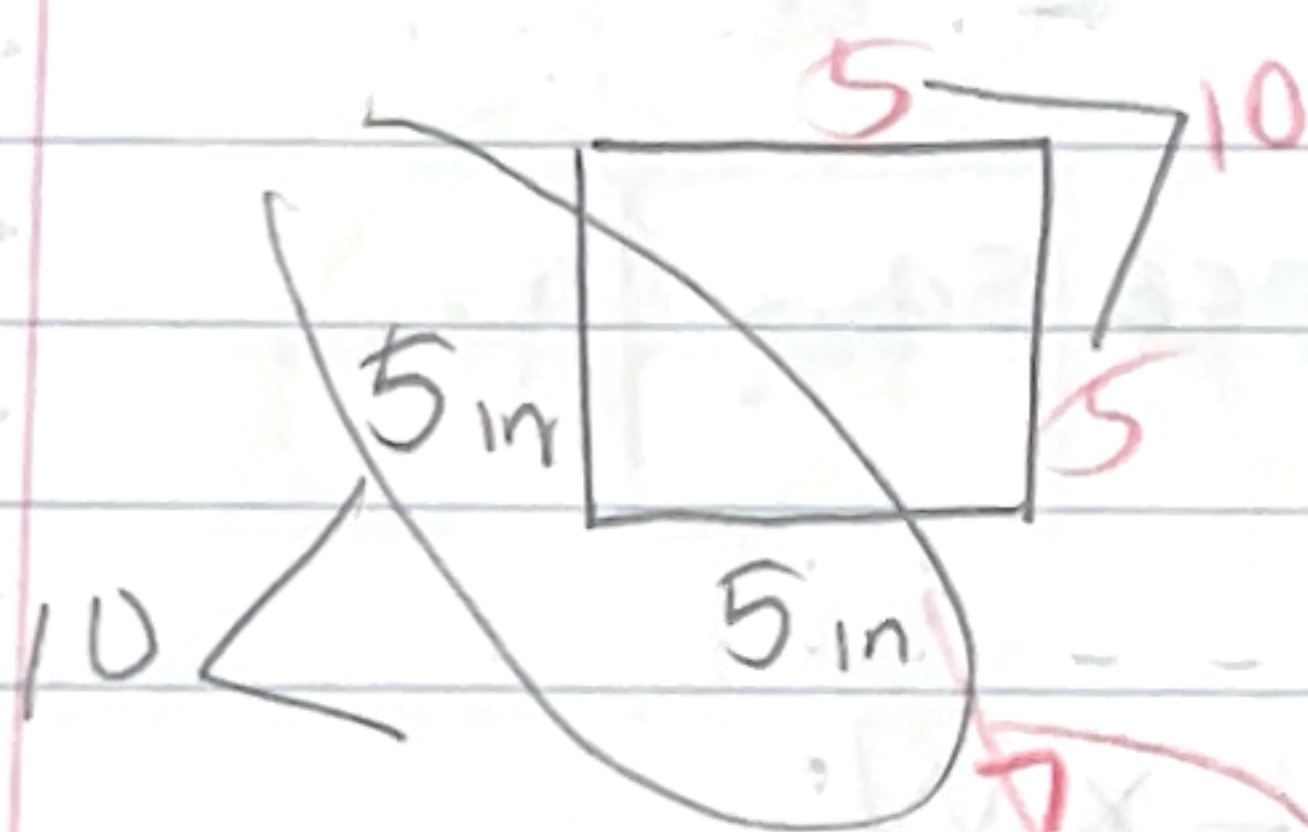
$$\frac{1}{2} \text{ of } P = 10$$



$$P = 20 \text{ in} \checkmark$$

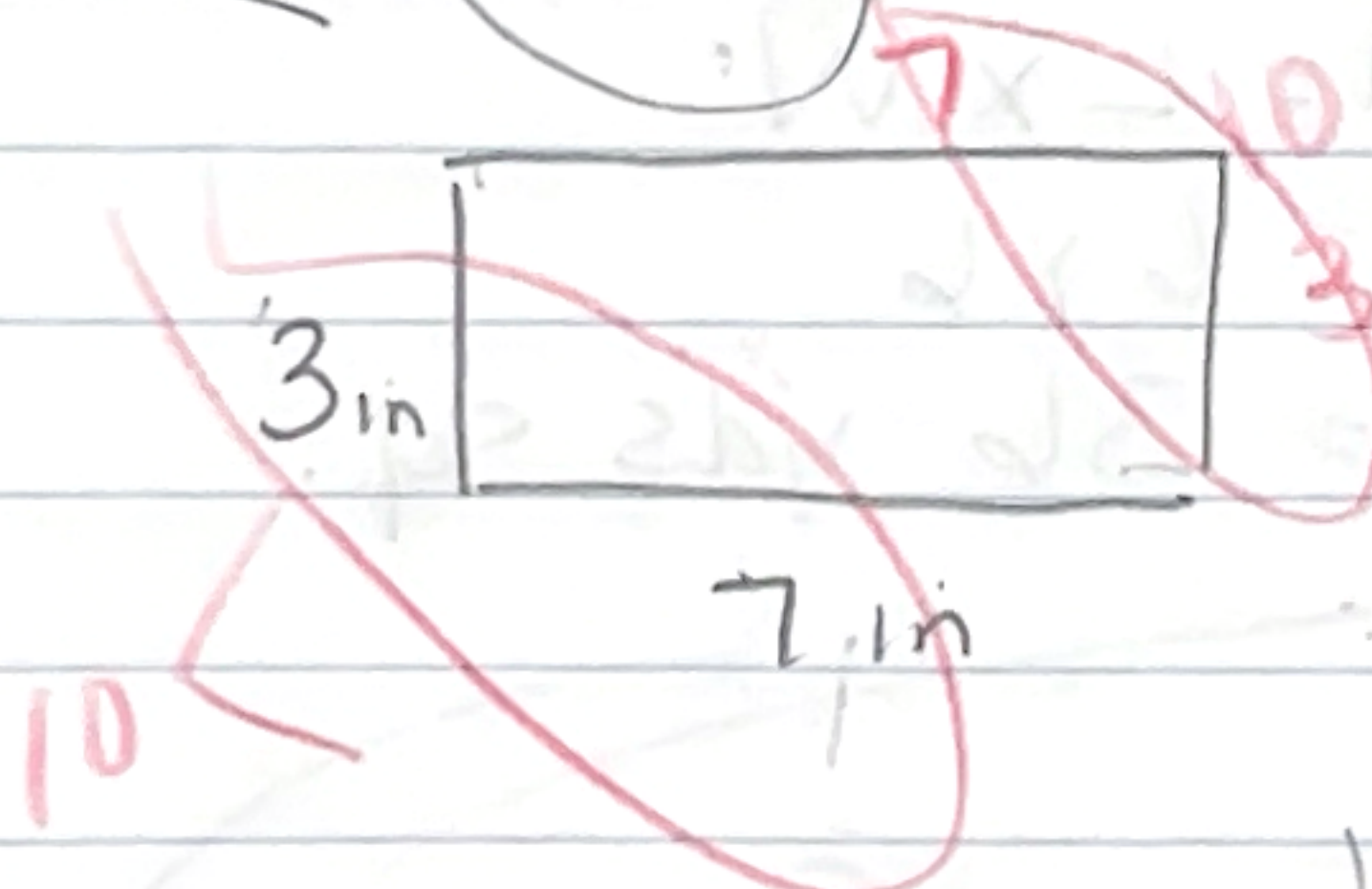
$$A = 8 \times 2 = 16 \text{ in sq}$$

L W



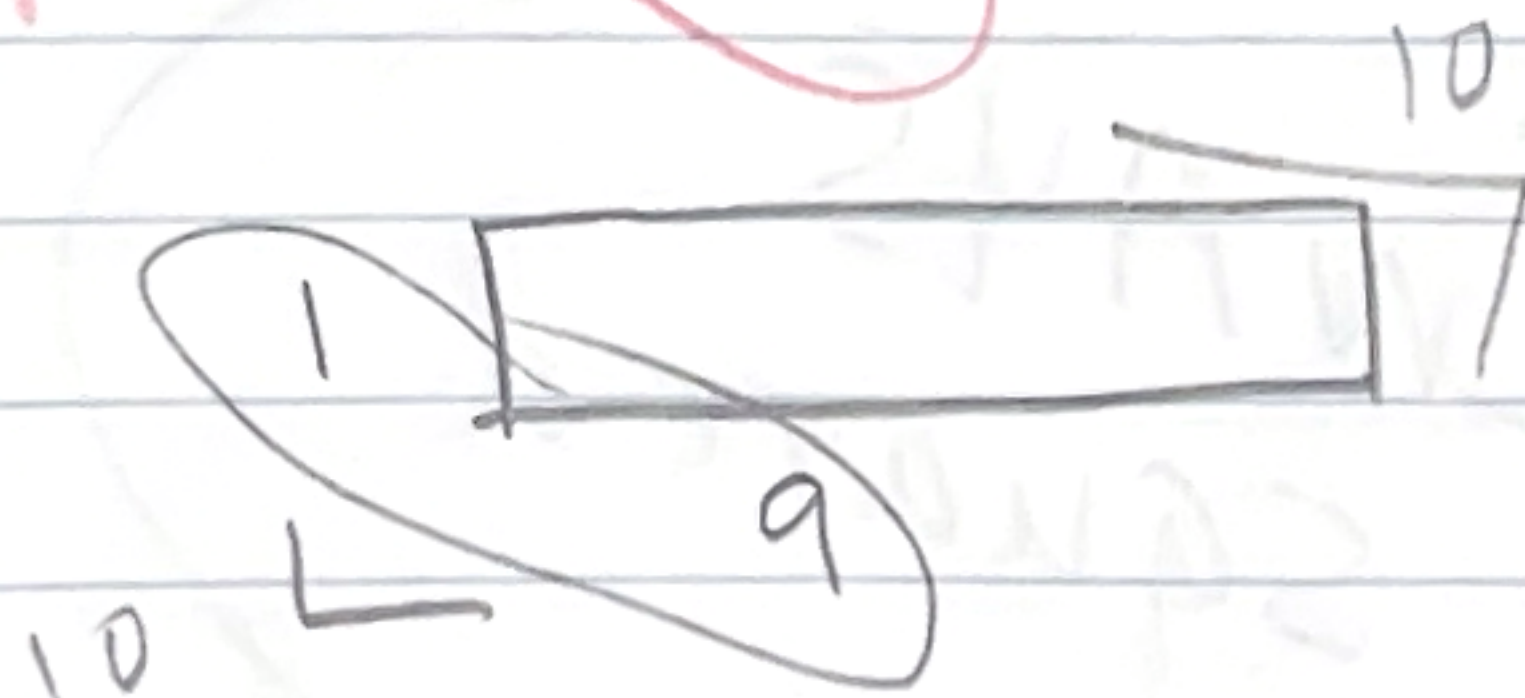
$$P = 20 \text{ in} \quad L + W = \frac{1}{2} \text{ of } P$$

$$A = 25 \text{ sq in}$$



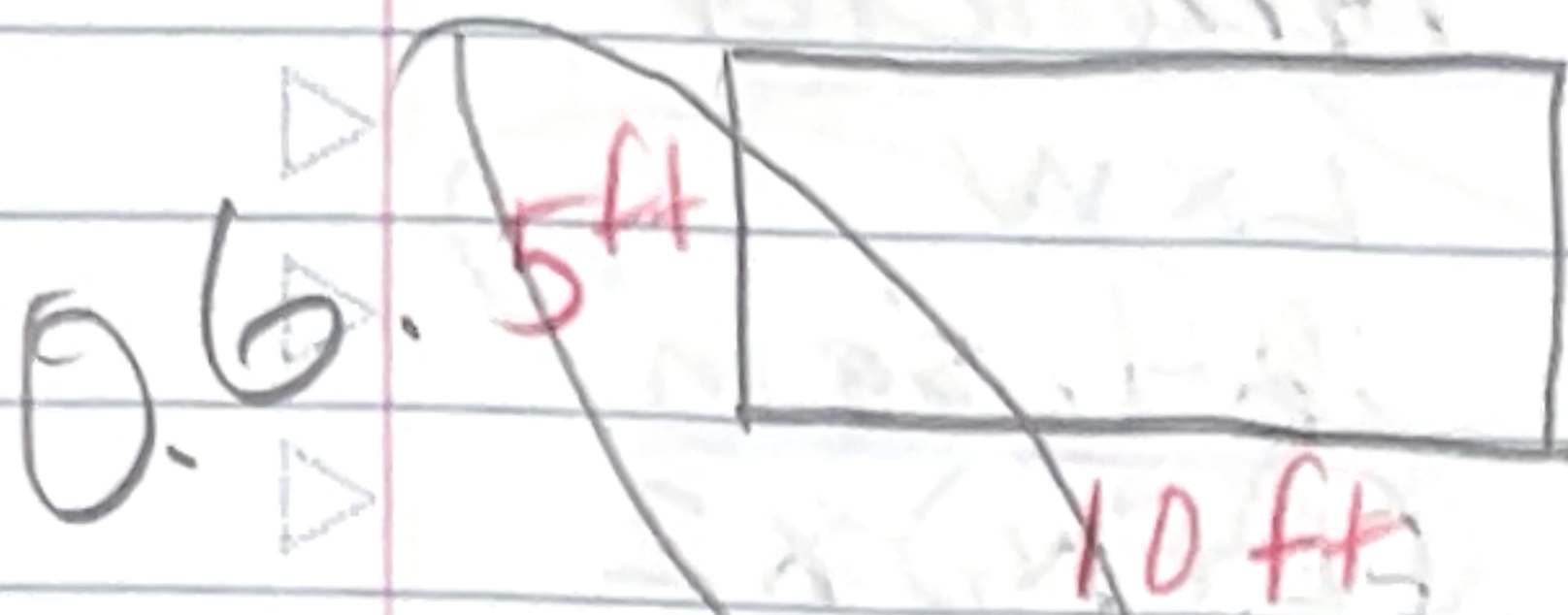
$$P = 20 \text{ in}$$

$$A = 21 \text{ sq in}$$



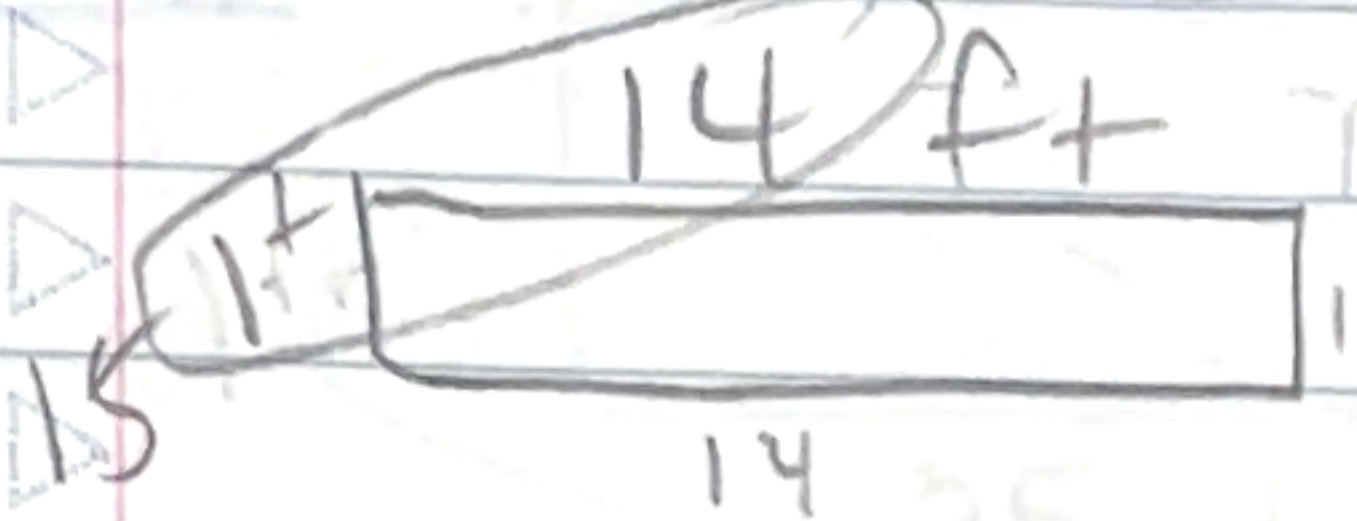
$$P = 20 \text{ in}$$

$$A = 9 \text{ sq in}$$



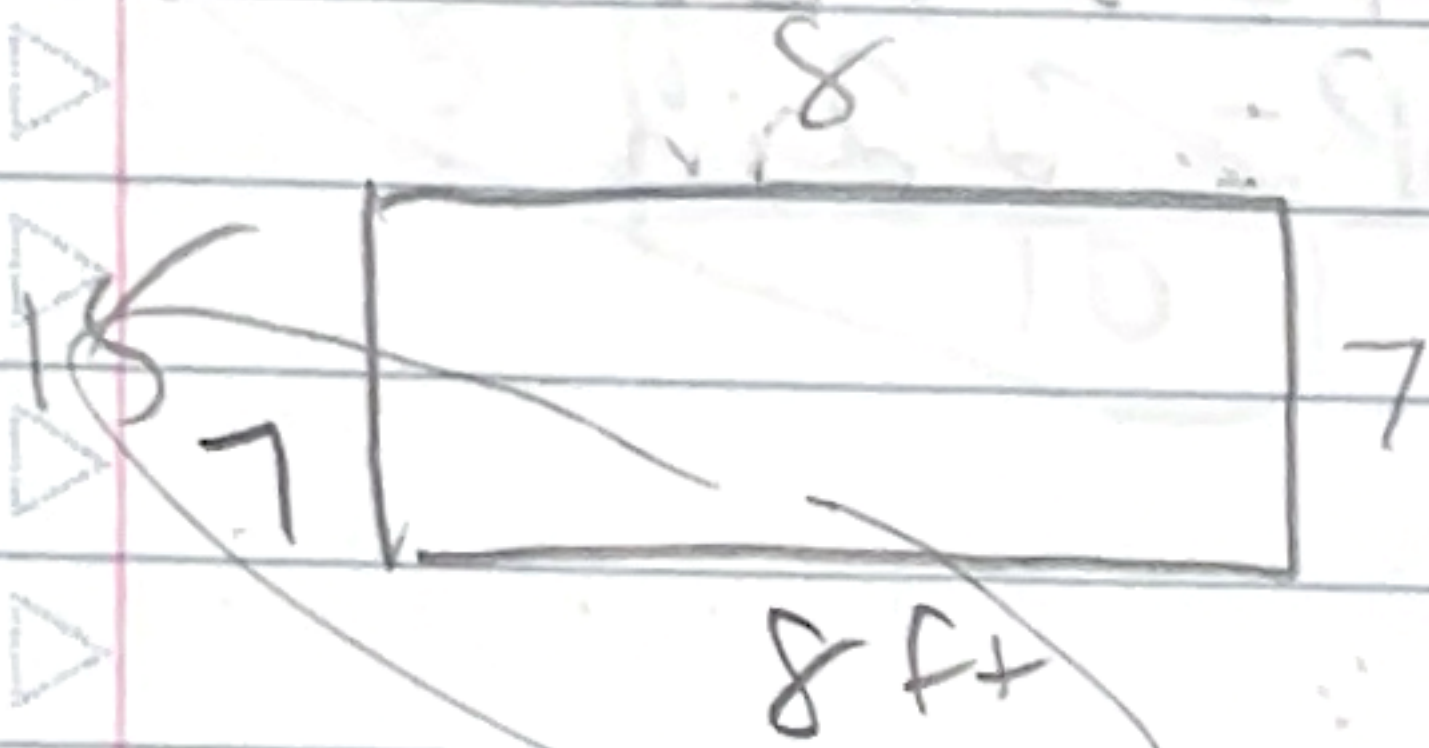
$$P = 30 \text{ ft} \quad 5 + 10 = 15$$

$$A = 50 \text{ sq ft} \quad 5 \times 10$$



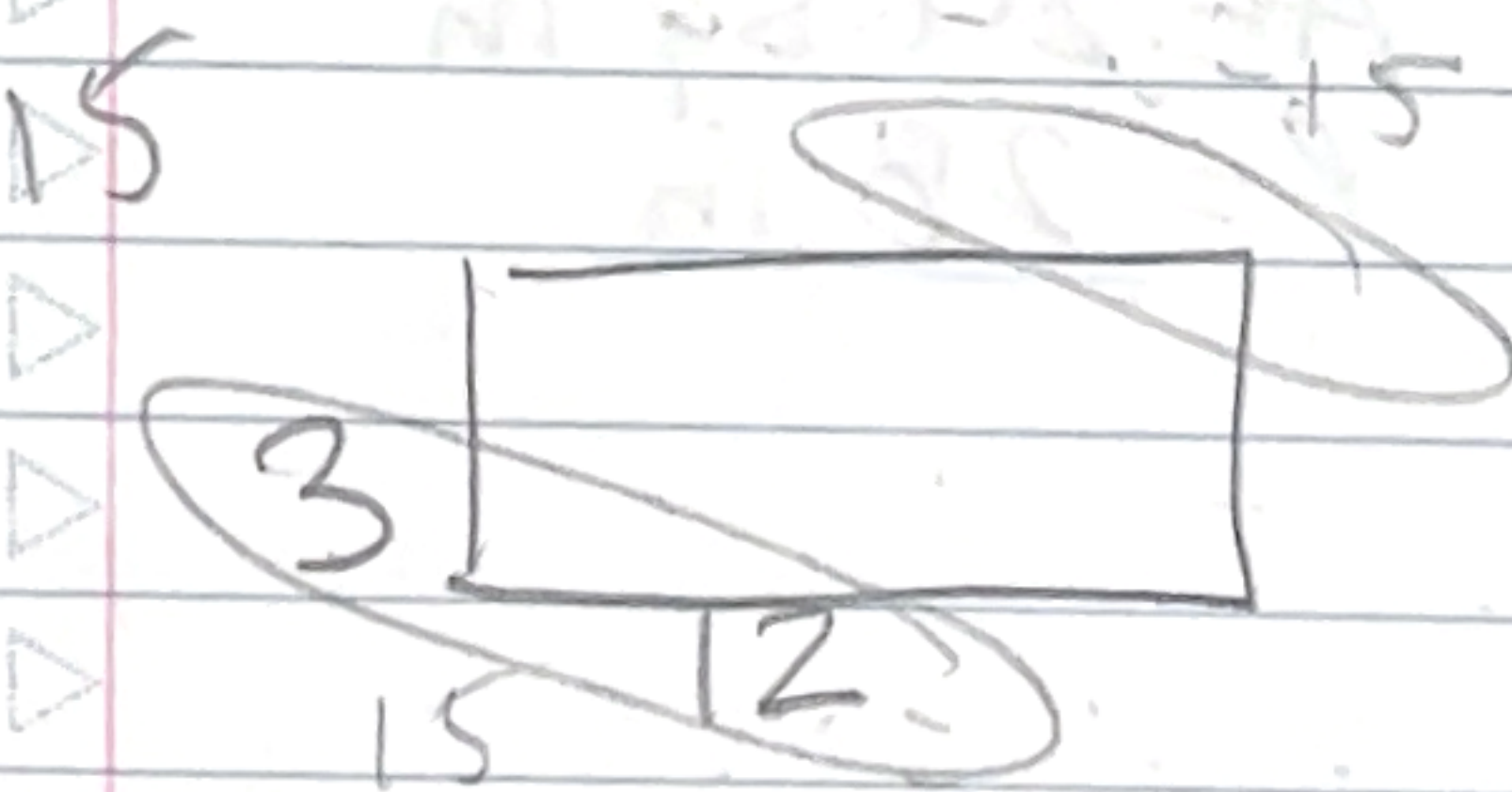
$$P = 30 \text{ ft}$$

$$A = 14 \text{ sq ft}$$



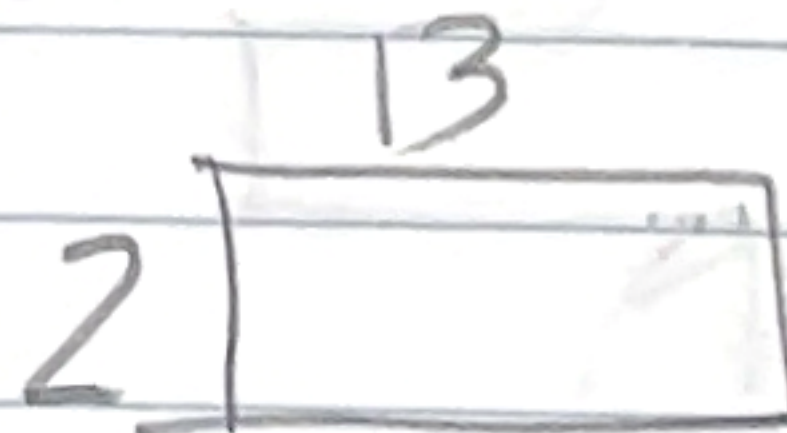
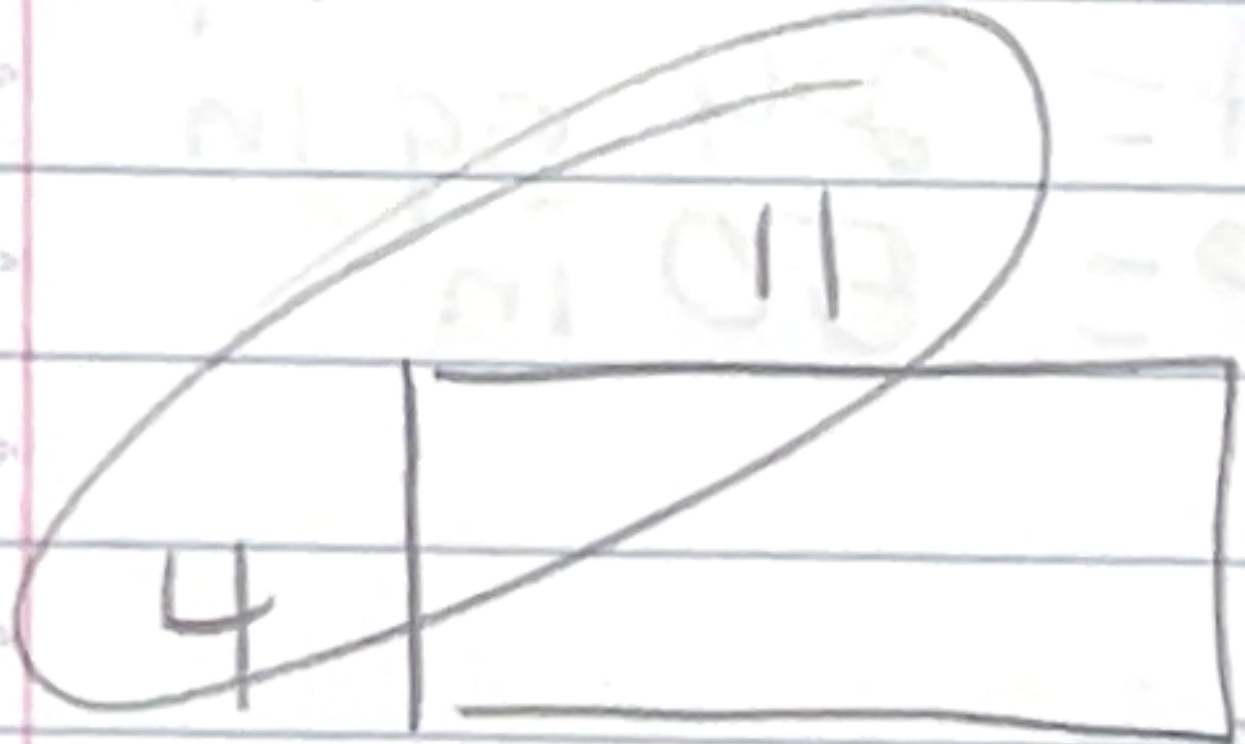
$$P = 30 \text{ ft}$$

$$A = 56 \text{ sq ft}$$



$$P = 30 \text{ ft}$$

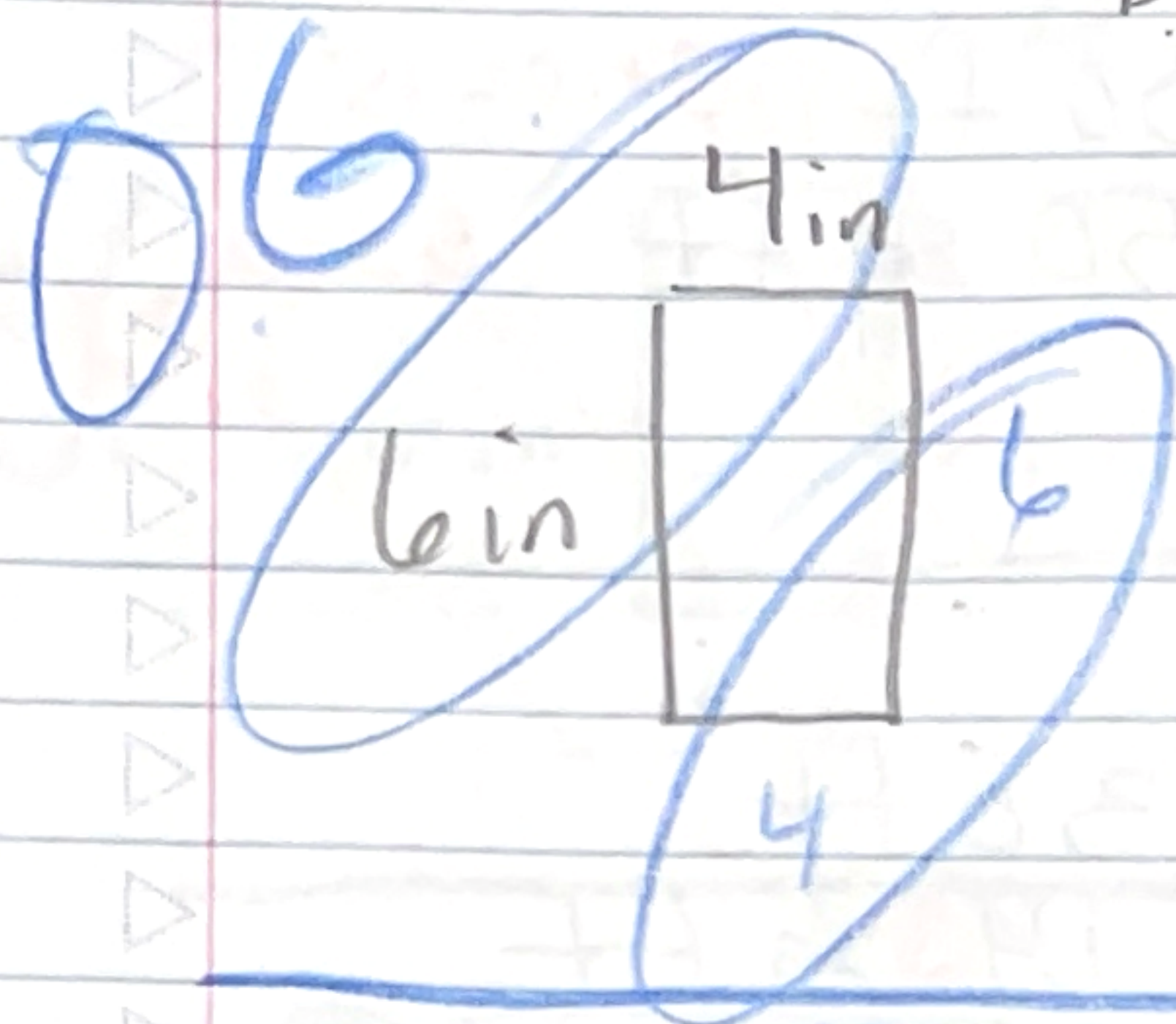
$$A = 36 \text{ sq ft}$$



72

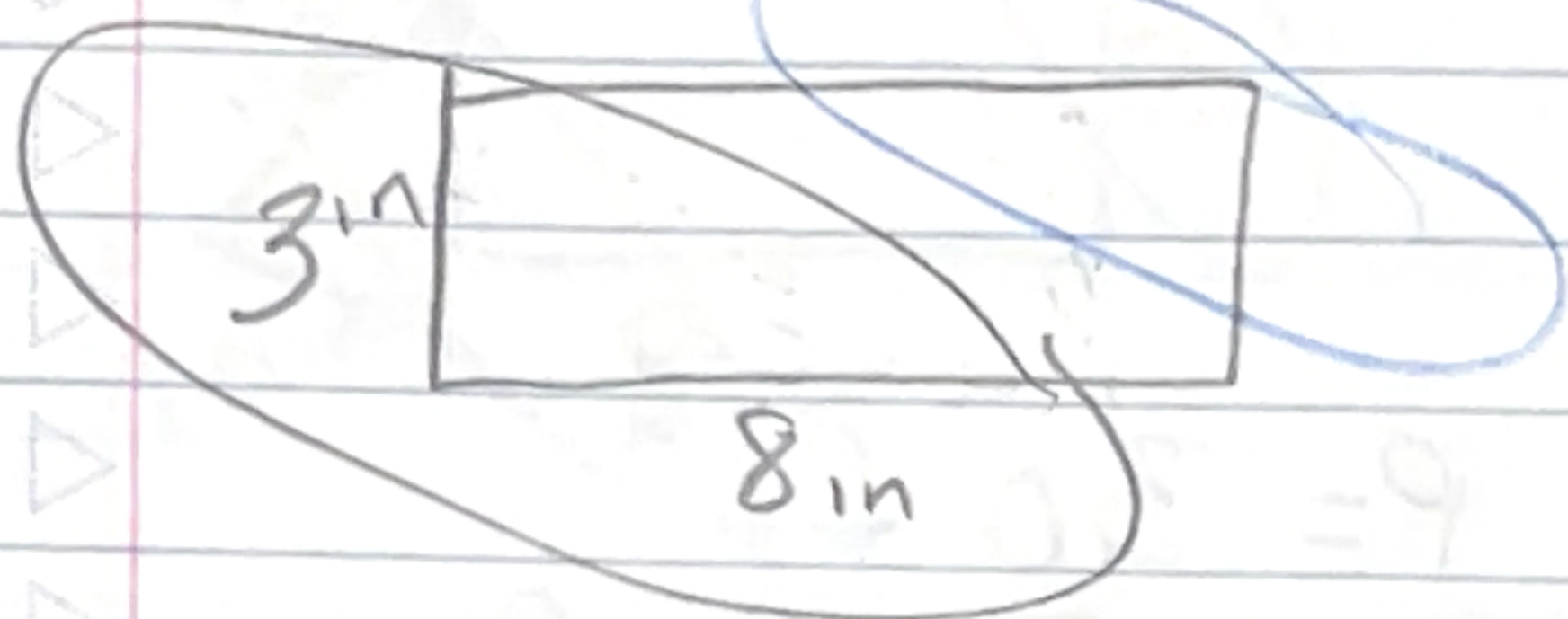
12/5/24 Ch. 6

Same Area Different Perimeter



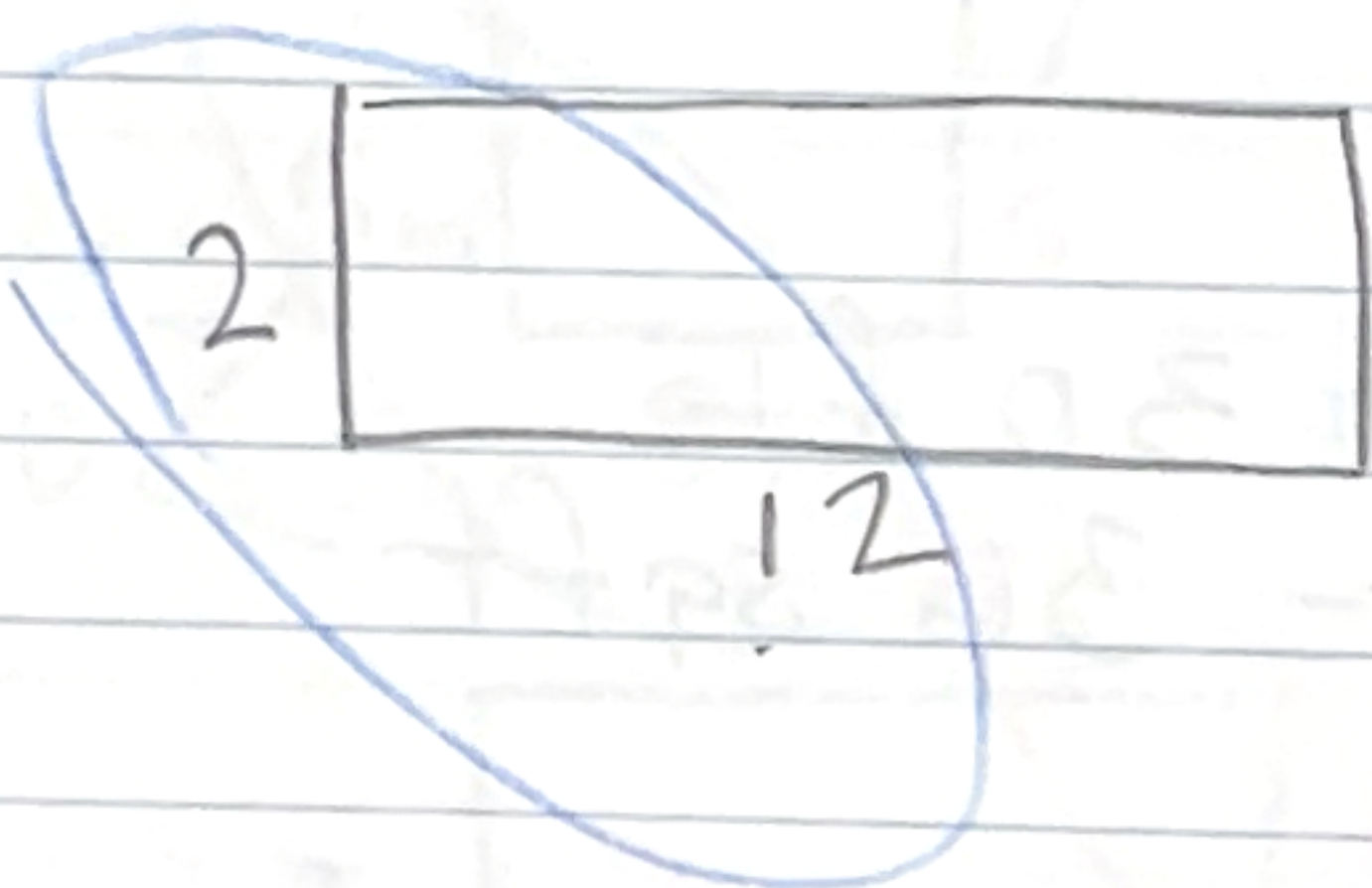
$$A = \frac{L \times W}{24 \text{ sq in}}$$

$$P = \frac{(L + W) \times 2}{(6 + 4) \times 2 = 20 \text{ in}}$$



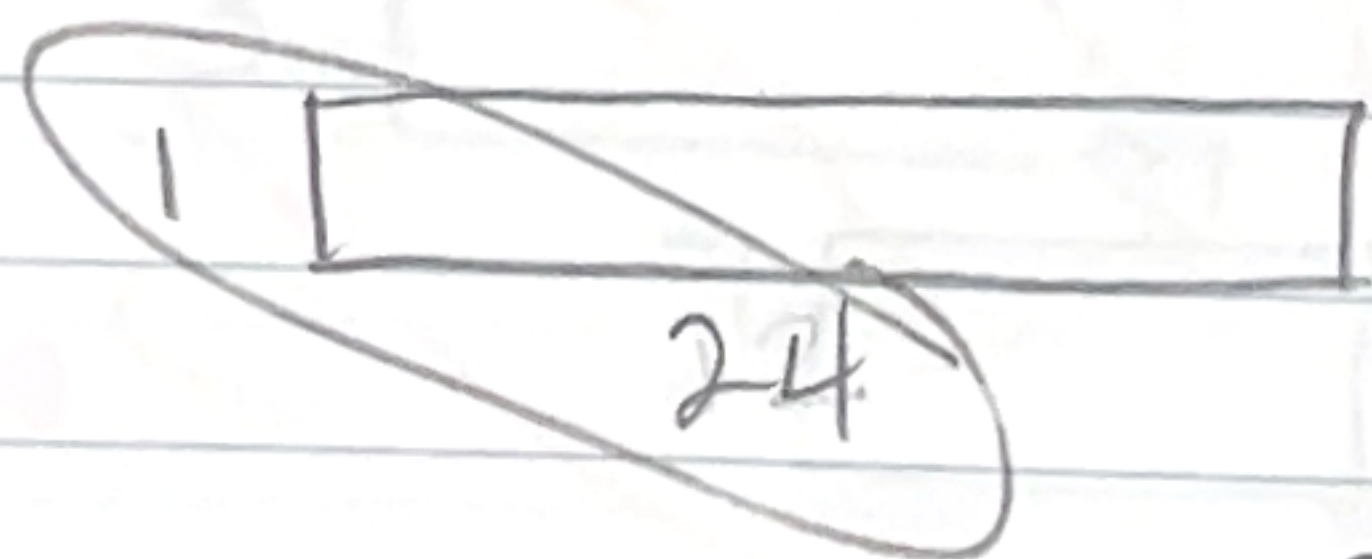
$$A = 24 \text{ sq in}$$

$$P = 22 \text{ in}$$



$$A = 24 \text{ sq in}$$

$$P = 28 \text{ in}$$



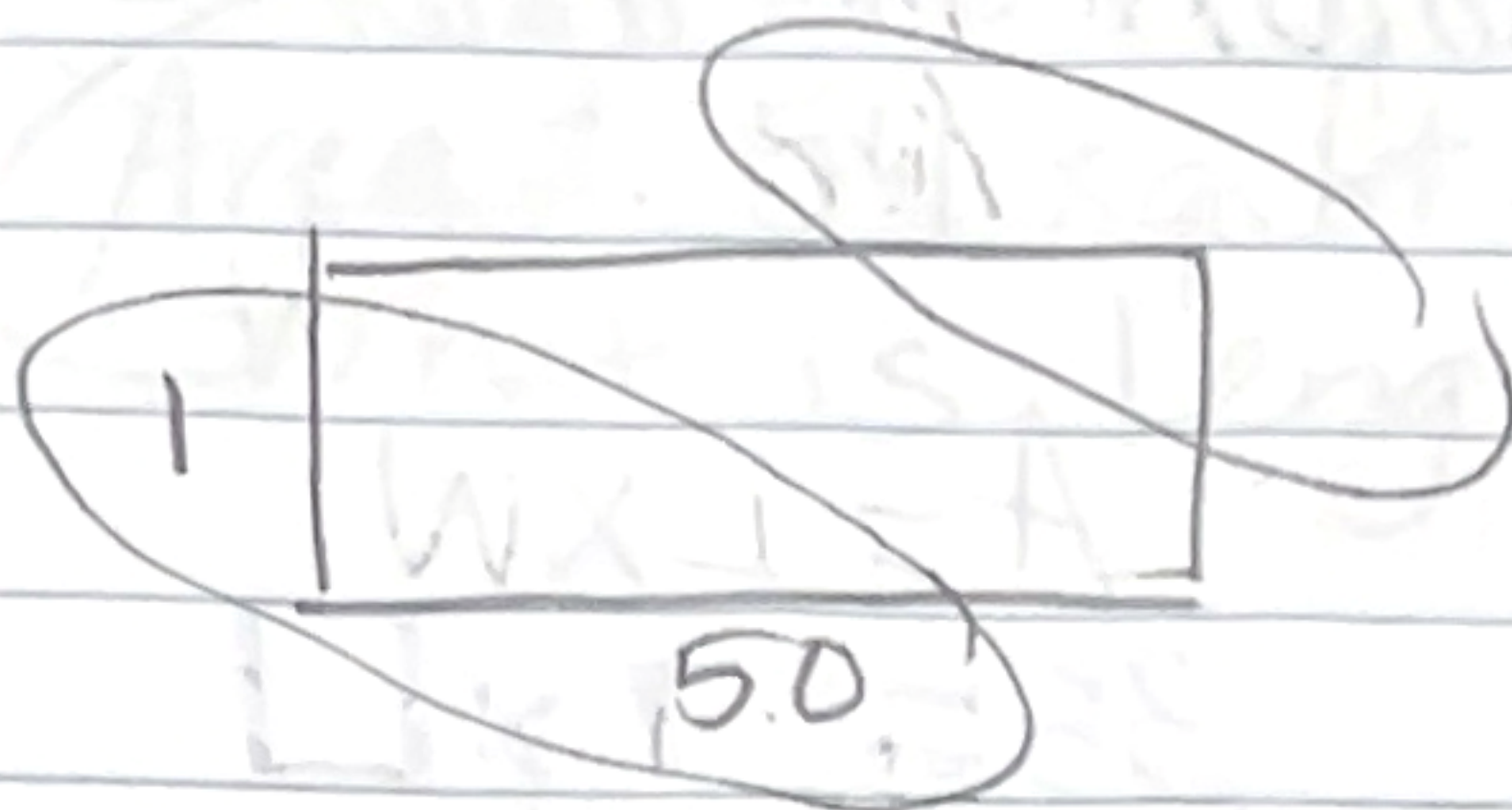
$$A = 24 \text{ sq in}$$

$$P = 50 \text{ in}$$

24	
1	24
2	12
3	8
4	6

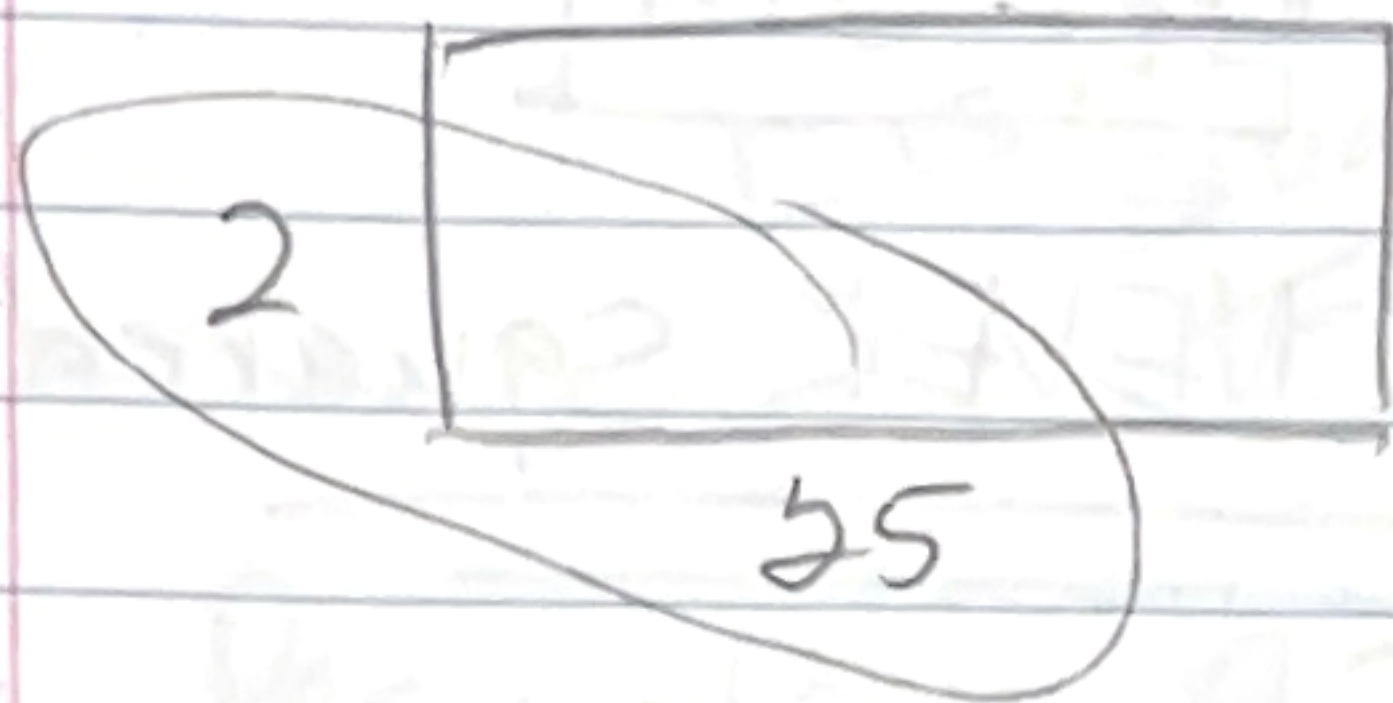
50

73



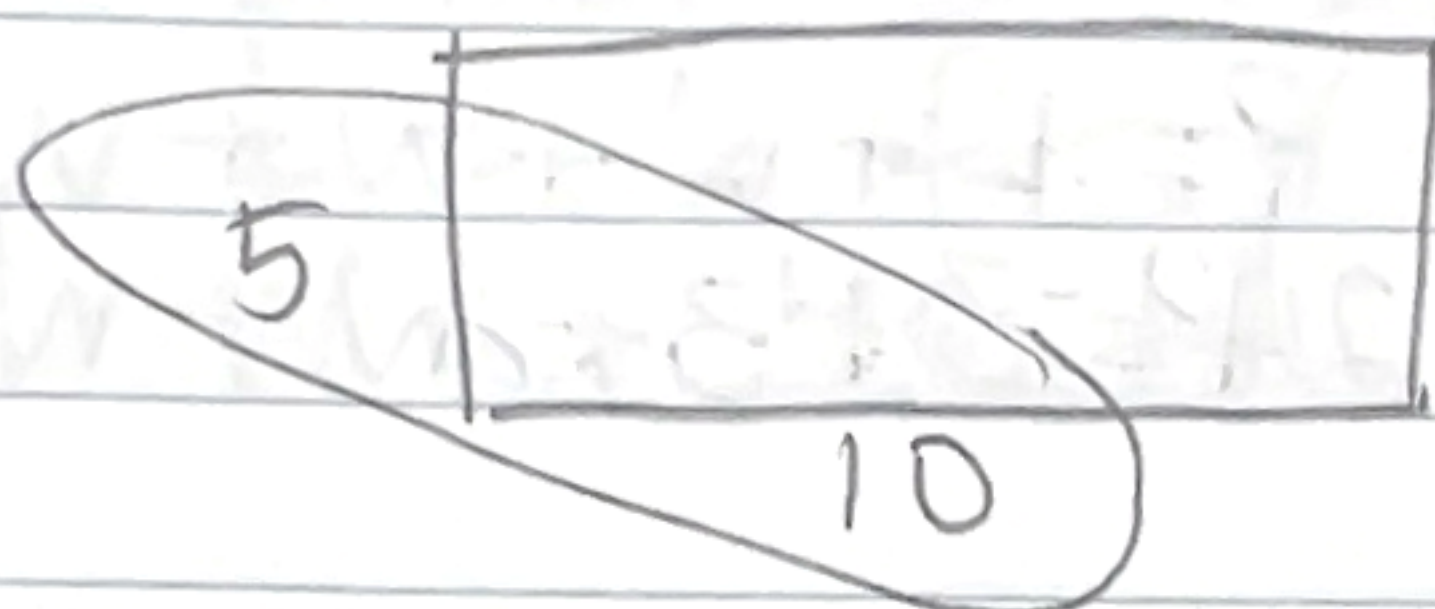
$$A = 50 \text{ sq ft}$$

$$P = 102 \text{ ft}$$



$$A = 50 \text{ sq ft}$$

$$P = 54 \text{ ft}$$



$$A = 50 \text{ sq ft}$$

$$P = 30 \text{ ft}$$

$$W + W = 81$$

$$2W = 81$$

$$A = 108 \text{ sq yds}$$

$$A = L \cdot W$$

$$L = 54 \text{ yds}$$

$$\frac{1}{2} \cdot 908 = 454$$

$$P = 140 \text{ miles}$$

$$L = 40 \text{ miles}$$

$$W = 30 \text{ miles}$$

$$P = 70 \text{ miles} = 40 + 30$$

74

12/9/24

Ch. 6 Unknown Measures

$$7 \text{ in} \quad \boxed{35 \text{ in} \cdot 2}$$

$$\boxed{5 \text{ in}}$$

$$A = L \times W$$

$$35 = 7 \times \square$$

$$\boxed{W = 5 \text{ in}}$$

L or W are NEVER Squared!

3 m

$$P = 24 \text{ meter}$$

3

$$P = L + L + W + W$$

$$24 = 3 + 3 + W + W$$

$$24$$

$$- 6$$

$$18$$

$$W + W$$

$$\div 2$$

$$\boxed{W = 9 \text{ in}}$$

$$24 \div 2 = 12 \text{ in}$$

$$3 + \boxed{9} = 12$$

1/2 method

1) Cut P in $\frac{1}{2}$!

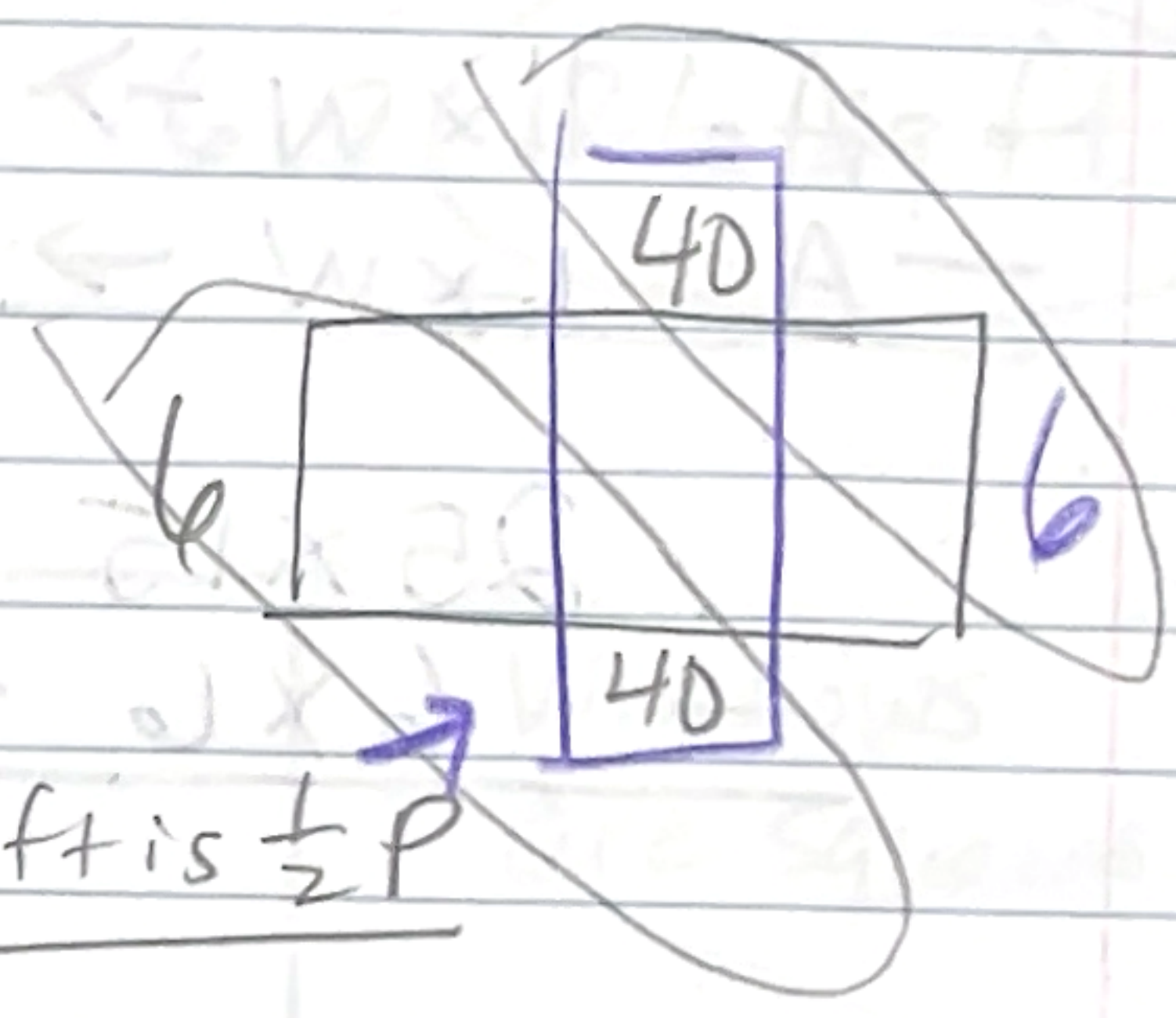
2) L + W is $\frac{1}{2}$ P!

Area = 54 sq ft Width is 6 ft.
What is Length?

$A = L \times W$
 $54 = L \times 6$
 $L = 9 \text{ ft}$

L is NOT squared

Perimeter = 92 ft
 $L = 6 \text{ ft}$
 $W = 40 \text{ ft}$

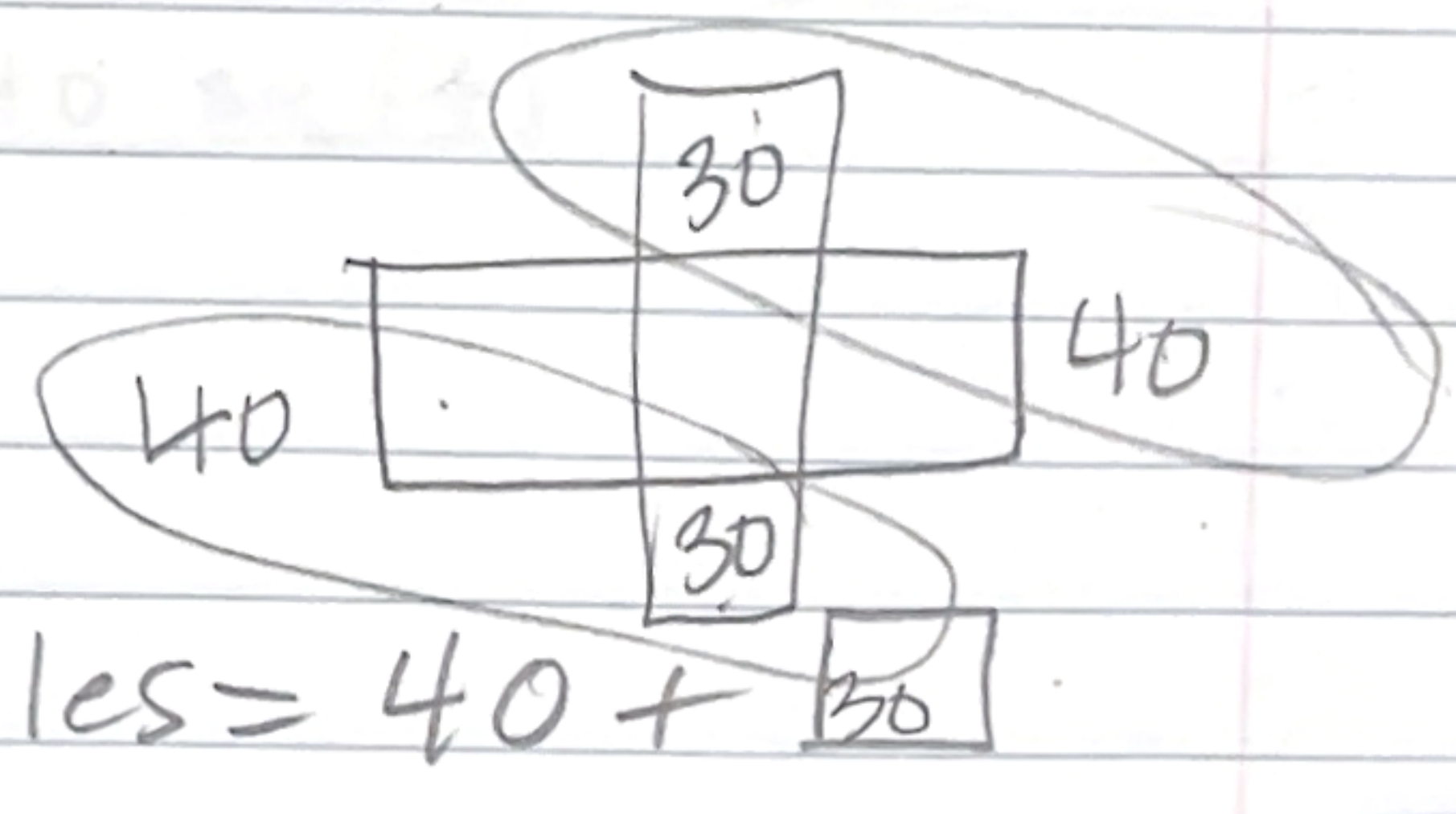


$92 \div 2 = 46 \text{ ft is } \frac{1}{2} P$
 $46 = 6 + 40$

$A = 108 \text{ sq yds}$
 $L = 9 \text{ yds}$
 $W = 12 \text{ yds}$

$A = L \times W$
 $108 = 9 \times \square$

$P = 140 \text{ miles}$
 $L = 40 \text{ miles}$
 $W = 30 \text{ miles}$

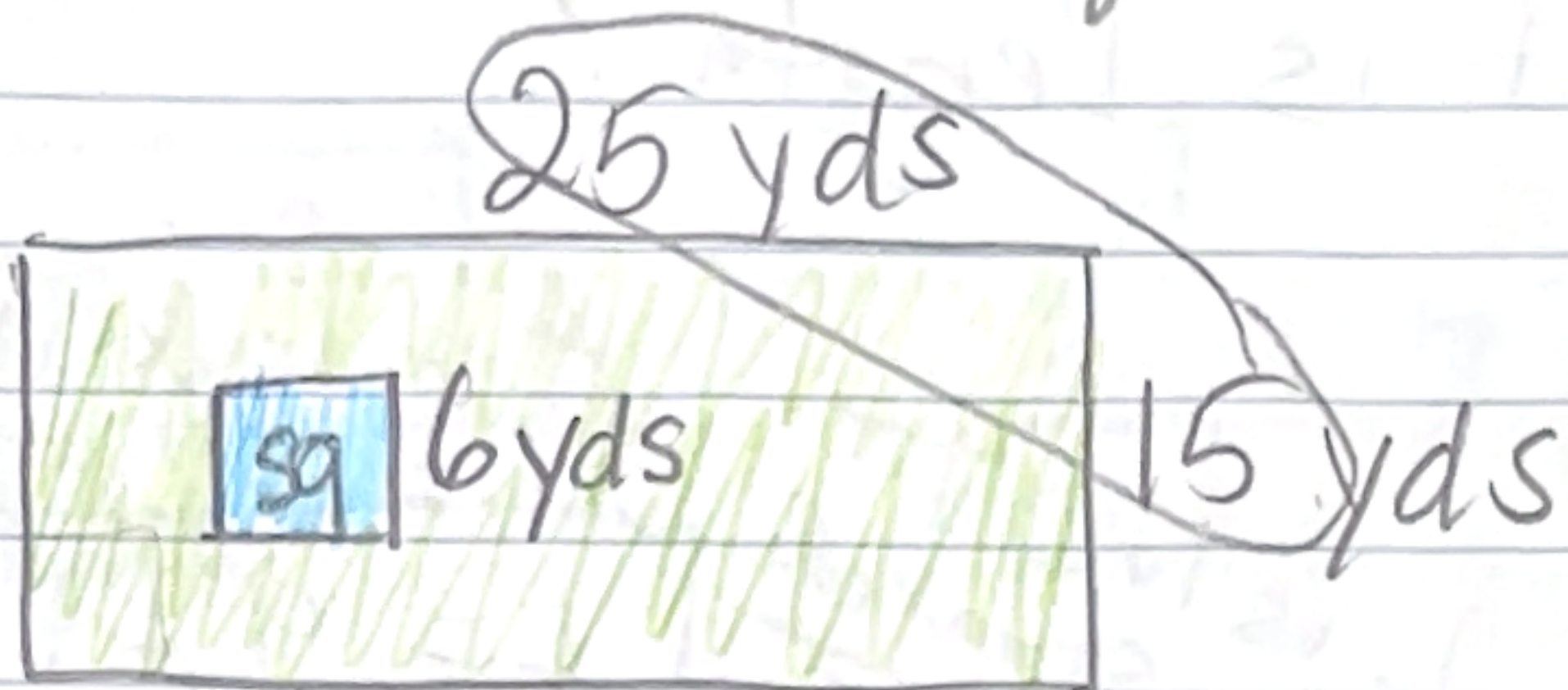


$\frac{1}{2} P = 70 \text{ miles} = 40 + 30$

12/10/24

Ch. 6

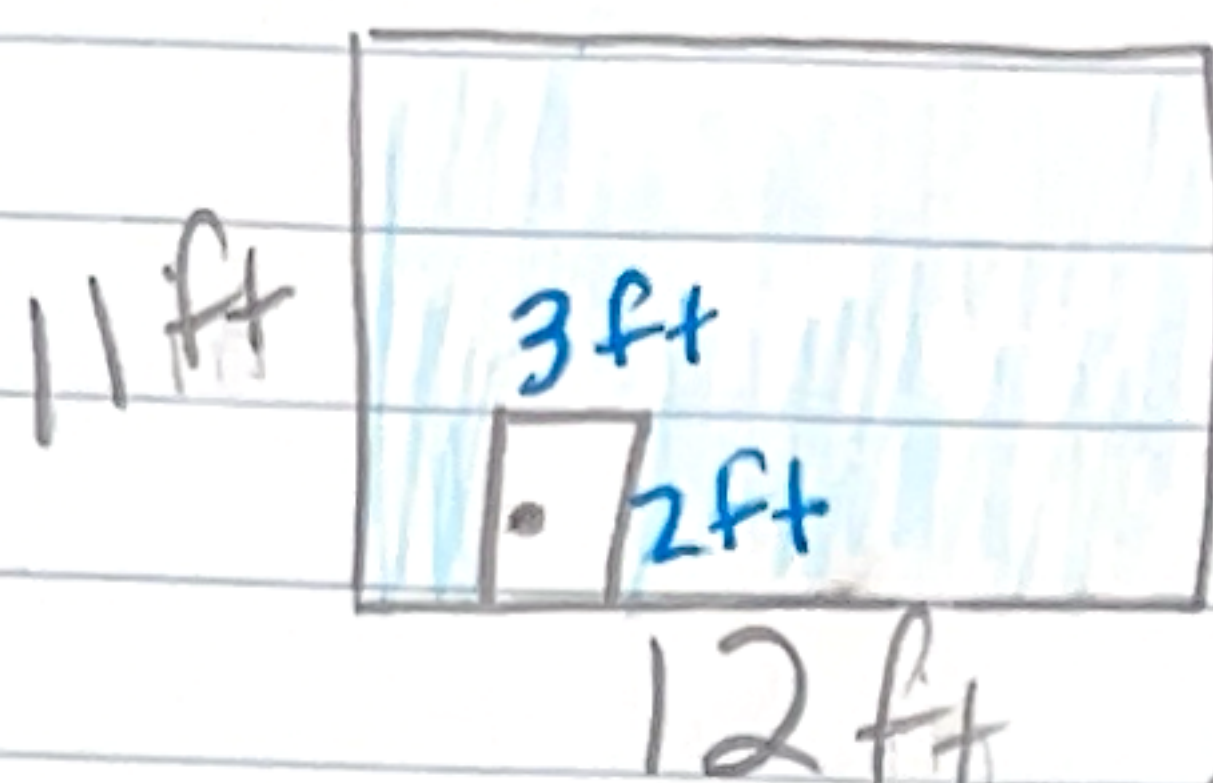
Area - Area Subtracting Area



$A = L \times W \rightarrow$ outside Area
 $- A = L \times W \rightarrow$ - inside Area

$$\begin{array}{r} 25 \times 15 \rightarrow 375 \text{ sq yds} \\ - 6 \times 6 \rightarrow - 36 \text{ sq yds} \\ \hline 339 \text{ sq yds} \end{array}$$

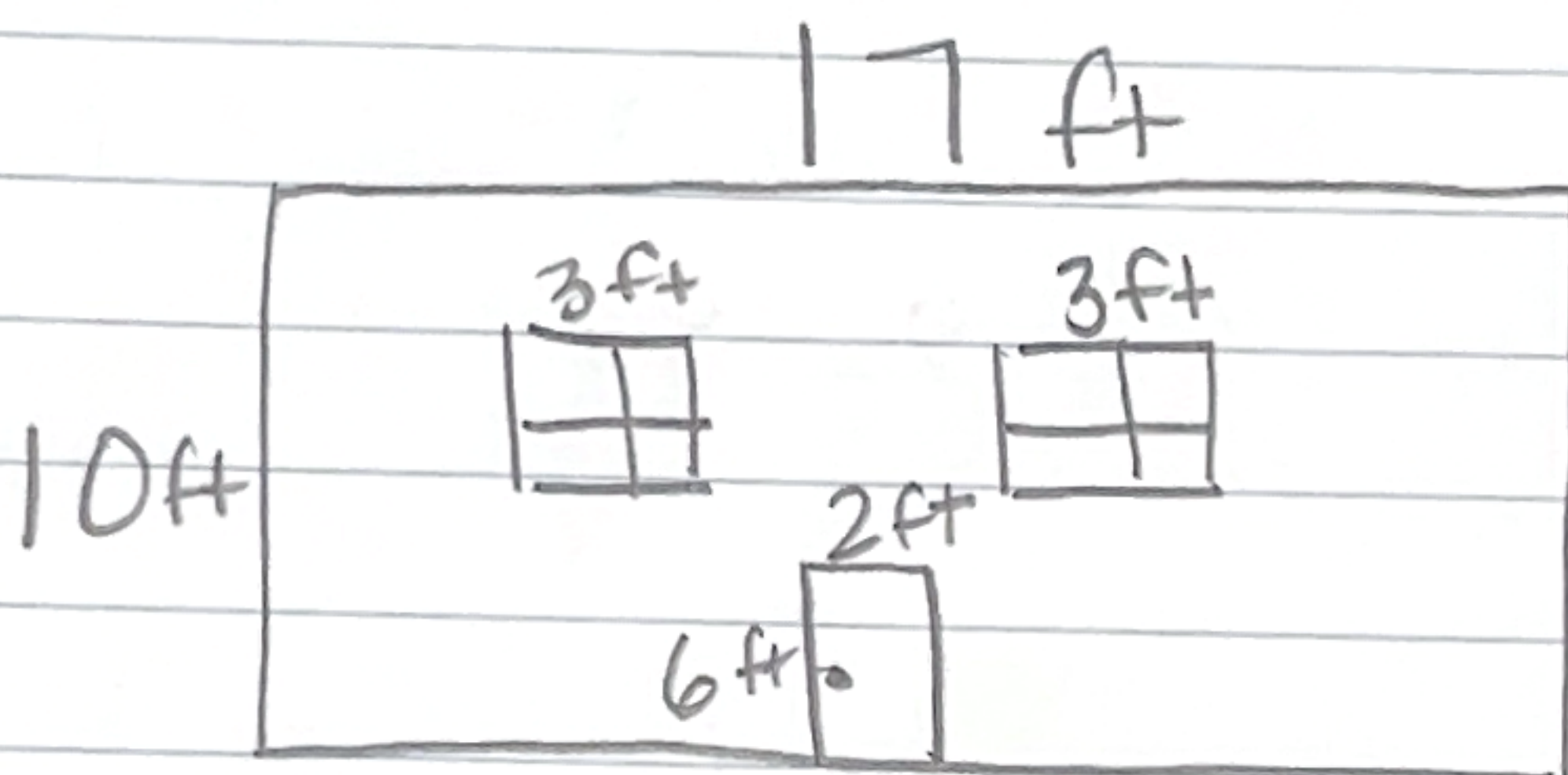
	10	5	
20	200	100	300
5	50	25	75
			<u>375</u>



What is A
of Shaded region?

$$(11 \times 12) - (3 \times 2)$$

$$132 - 6 = 126 \text{ sq ft}$$



Windows
are Squares

$$(17 \times 10) - [(3 \times 3) + (3 \times 3) + (6 \times 2)]$$

$$9 + 9 + 12 = 30$$

$$170 - 30 = 140 \text{ sq ft}$$