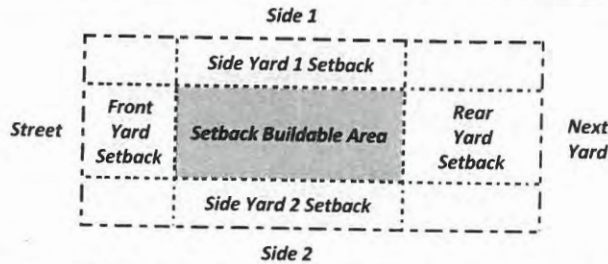


Name PAUL KING

## FAR Worksheet #1

Directions: Answer all of the questions below based on the plan diagram provided.



Property size 150 feet deep x 100 feet wide

Front Setback 20 feet

Rear Setback 30 feet

Side 1 Setback 10 feet

Side 2 Setback 15 feet

1. What is the total square footage of the lot?

$$\begin{aligned} \text{AREA} &= \text{LENGTH} \times \text{WIDTH} \\ &= 150' \times 100' \\ &= 15,000 \text{ sq ft} \end{aligned}$$

2. After considering the setbacks what is the total buildable area? (FOOTPRINT)

$$\begin{aligned} \text{FOOTPRINT} &= 150' - (20 + 30) = 150 - 50 = 100' \\ &= 100' - (10 + 15) = 100 - 25 = 75' \\ \text{AREA OF FOOTPRINT} &= 100' \times 75' = 7500 \text{ sq ft} \end{aligned}$$

3. If the Floor Area Ratio (FAR) is 2, what is the allowable building area?

$$\begin{aligned} \text{MAX ALLOWABLE AREA} &= \text{FAR} \times \text{LOT AREA} \\ &= 2 \times 15,000 \\ &= 30,000 \text{ sq ft} \end{aligned}$$

4. Based on the FAR of 2 and the buildable lot area after setbacks how tall is the building?

$$\begin{aligned} \# \text{ STORIES} &= \text{BUILDABLE AREA} / \text{FOOTPRINT} \\ &= 30,000 / 7500 \\ &= 4 \text{ STORIES} \end{aligned}$$

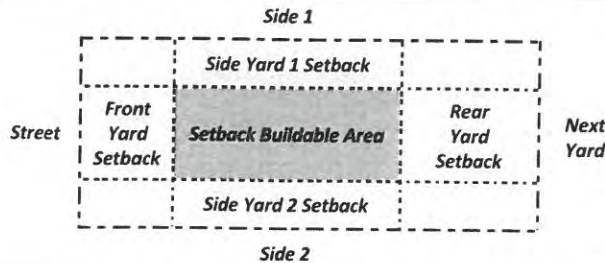
5. Based on the FAR of 4 and the buildable lot area after setbacks how tall is the building?

$$\begin{aligned} \# \text{ STORIES} &= (\text{FAR} \times \text{LOT AREA}) / \text{FOOTPRINT} \\ &= (4 \times 15,000) / 7500 \\ &= (60,000) / 7500 \\ &= 8 \text{ STORIES} \end{aligned}$$



## Worksheet #1

**Directions:** Answer all of the questions below based on the plan diagram provided.



Property size 150 feet deep x 100 feet wide

Front Setback 20 feet

Rear Setback 30 feet

Side 1 Setback 10 feet

Side 2 Setback 15 feet

1. What is the total square footage of the lot?

$$\begin{aligned} \text{AREA} &= \text{LENGTH} \times \text{WIDTH} \\ &= 150' \times 100' \\ &= \boxed{15,000 \text{ } \cancel{\text{sq ft}}} \end{aligned}$$

2. After considering the setbacks what is the total buildable area? (FOOTPRINT)

$$\begin{aligned} \text{FOOTPRINT} &= 150' - (20 + 30) = 150' - 50' = 100' \\ \text{AREA OF FOOTPRINT} &= 100' - (10 + 15) = 100' - 25' = 75' \\ &= \boxed{7500 \text{ } \cancel{\text{sq ft}}} \end{aligned}$$

3. The property owner wishes to build a fence along three edges of the property including the two sides and the back? How long is the fence?

$$\begin{aligned} \text{PERIMETER} &= 150' + 150' + 100' + 100' \\ \text{FENCE} &= \boxed{500' \text{ LINEAR FEET}} \end{aligned}$$

~~400'~~

4. If the Open Space Ratio (OSR) is 20 or 20% of the lot? What is the open space requirement?

$$\begin{aligned} \text{REQUIRED OPEN AREA} &= 20\% \text{ OF LOT AREA} \\ &= 20\% \text{ OF } 15,000 = .2 \times 15000 \\ &= \boxed{3000 \text{ } \cancel{\text{sq ft}}} \end{aligned}$$

5. Considering the setbacks and the OSR above which of the two is more restrictive and what is the maximum allowable footprint of the building?

$$\begin{aligned} \text{OPEN AREA} &= \text{TOTAL LOT AREA} - \text{FOOTPRINT} \\ \text{FOR SETBACKS} &= 15000 - 7500 = 7500 \text{ } \cancel{\text{sq ft}} \text{ OPEN} \\ \text{OSR} &= 3000 \text{ } \cancel{\text{sq ft}} \end{aligned}$$

\*  $\boxed{\text{SETBACKS } 7500 \text{ } \cancel{\text{sq ft}} \text{ OPEN} \triangleright \text{OSR } 3000 \text{ } \cancel{\text{sq ft}}}$