

Step 1: Calculate the total width of the bathroom in inches.

We know there are 10 tiles along the width, and each tile is 6 inches.

Width in inches = Number of tiles × Tile length = $10 \times 6 = 60$ inches

Step 2: Convert the width from inches to feet.

To convert inches to feet, we divide by 12 (since 1 foot = 12 inches).

Width in feet = $60 \text{ inches} \div 12 = 5 \text{ feet}$

Step 3: Calculate the total length of the bathroom in inches.

We know there are 20 tiles along the length, and each tile is 6 inches.

Length in inches = Number of tiles × Tile length = $20 \times 6 = 120$ inches

A)

Calculate the total width of the bathroom in inches: number of tiles × tile length =

$$10 * 6 = 60 \text{ inches}$$

Convert the width from inches to feet: width in inches ÷ 12 = $60 / 12 = 5 \text{ feet}$

Calculate the total length of the bathroom in inches: number of tiles × tile length

$$= 20 * 6 = 120 \text{ inches}$$

Convert the length from inches to feet: length in inches ÷ 12 = $120 / 12 = 10 \text{ feet}$

Calculate the square footage of the bathroom: length × width = $10 * 5 = 50 \text{ sq feet}$

B)

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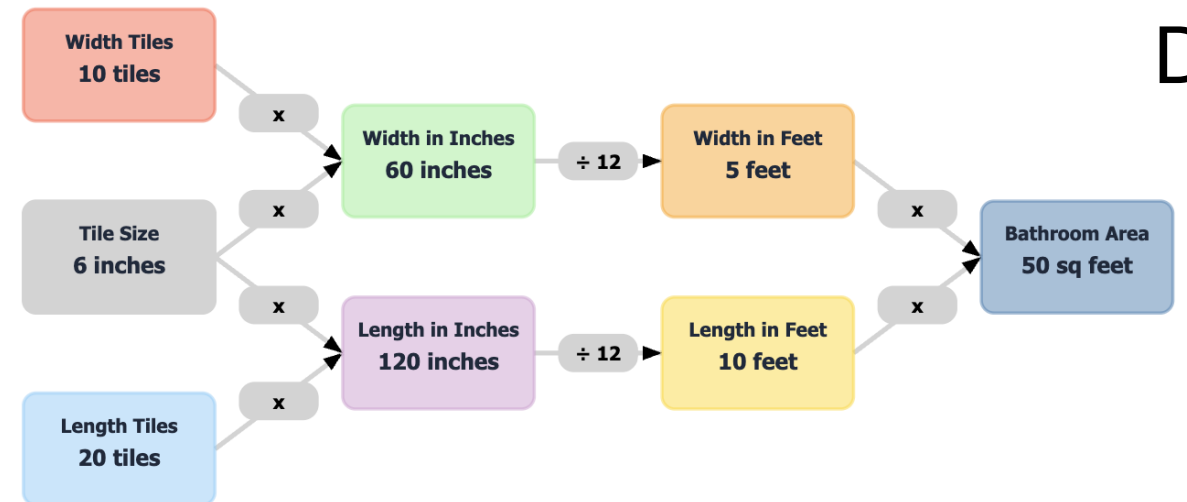
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Python Solution

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# Calculate the total width of the bathroom in inches
1 width_inches = 10 * 6
# Convert the width from inches to feet
2 width_feet = width_inches / 12
# Calculate the total length of the bathroom in inches
3 length_inches = 20 * 6
# Convert the length from inches to feet
4 length_feet = length_inches / 12
# Calculate the square footage of the bathroom
5 bathroom_area = length_feet * width_feet
```

C)



D)