





Jay is an artist who makes abstract tile murals like the one seen here. They use square tiles of different sizes to make murals in and on buildings in the city. Jay has been asked to create a mural for a 100 square foot space in the lobby of the City Art Museum and has created a design that incorporates 5 different colors.

How many square feet of each color will Jay need to complete their mural?

10x10

black = 20

Blue = 40

Brown/Red = 20

Yellow = 18

White = 2

100 ✓

Extension questions:

How would the answer change if the figure was 400 square feet?

If the blue tiles each cost \$2.57 per square foot and the black tiles cost \$3.46 and all the others cost \$2.15, how much would the materials for the mural cost?

$$\text{Blue } \$2.57 \times 40 = 102.80$$

$$\text{Black} = \$3.46 \times 20 = 69.20$$

$$\text{Red} = 2.15 \times 20 = 43$$

$$\text{Yellow} = 2.15 \times 18 = 38.70$$

$$\text{White} = 2.15 \times 2 = 4.3$$

\$258