Area of a Rectangle

You have learned how to multiply fractions by finding the area of a rectangle.

What is the area of a horse pasture that is $\frac{3}{8}$ mile long by $\frac{2}{3}$ mile wide?

You can draw the pasture on a $24 \times 24$ grid.

$\frac{3}{8} = \frac{9}{24}$ Change each length and width to 24ths.

$\frac{2}{3} = \frac{16}{24}

Area = length \times width

$\frac{2}{3} \times \frac{3}{8} = \frac{16}{24} \times \frac{9}{24} = \frac{144}{576}$

$\frac{144}{576} = \frac{1}{4}$.

So, the pasture has an area of $\frac{1}{4}$ square mile.

For questions 1-2, find each area.

1. a rectangle with sides of lengths $\frac{1}{6}$ yard and $\frac{3}{4}$ yard ________________

2. a square with sides of lengths $\frac{2}{5}$ inch ________________

3. Writing to Explain Is $\frac{5}{8}$ sq. in. a reasonable answer for the area of a rectangle with lengths of $\frac{1}{8}$ inch by 5 inches?

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