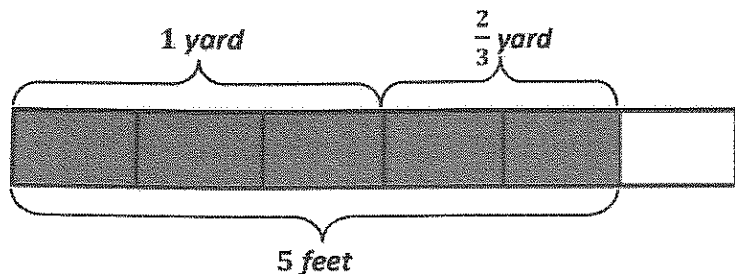


G4-M7-Lesson 12

1. Draw a tape diagram to show $1\frac{2}{3}$ yards = 5 feet.



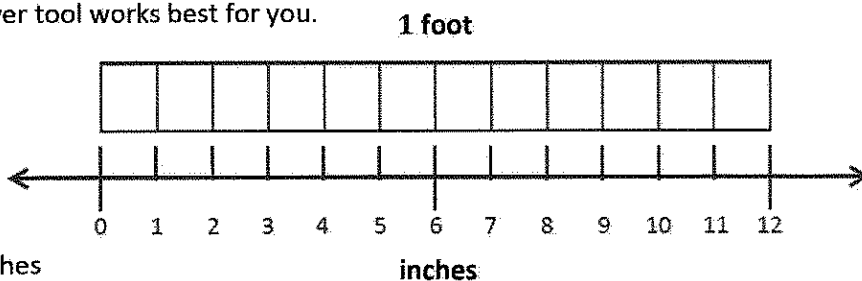
I know that 1 yard = 3 feet, so I can decompose each yard in my tape diagram into 3 feet. I can shade in $1\frac{2}{3}$ yards, and since each unit is $\frac{1}{3}$ yard, or 1 foot, I can see that $1\frac{2}{3}$ yards is equal to 5 feet.

2. Solve the problems using whatever tool works best for you.

a. $\frac{6}{12}$ foot = 6 inches

b. $\frac{9}{12}$ foot = $\frac{3}{4}$ foot = 9 inches

c. $\frac{8}{12}$ foot = $\frac{4}{6}$ foot = 8 inches



For part (a), I know that $\frac{6}{12}$ foot = $\frac{1}{2}$ foot, and I know that half a foot is 6 inches. For parts (b) and (c), I can make equivalent fractions and then find the number of inches. $\frac{3 \times 3}{4 \times 3} = \frac{9}{12}$. $\frac{9}{12}$ foot is the same as 9 inches.

3. Solve.

<p>a. $5\frac{1}{3}$ yd = <u>16</u> ft</p> <p>15 1 feet foot</p>	<p>b. $4\frac{3}{4}$ gal = <u>19</u> qt</p> <p>16 3 quarts quarts</p>	<p>c. $3\frac{1}{3}$ ft = <u>40</u> in</p> <p>36 4 inches inches</p>
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1 yard = 3 feet, so 5 yards = 5×3 feet = 15 feet. And $\frac{1}{3}$ yard = 1 foot. 15 feet + 1 foot = 16 feet.

1 gallon = 4 quarts, so 4 gallons = 4×4 quarts = 16 quarts. And $\frac{1}{4}$ gallon = 1 quart, so $\frac{3}{4}$ gallon = 3 quarts. 16 quarts + 3 quarts = 19 quarts.

1 foot = 12 inches, so 3 feet = 3×12 inches = 36 inches. And $\frac{1}{12}$ foot = 1 inch, so $\frac{1}{3} = \frac{1 \times 4}{3 \times 4} = \frac{4}{12}$. $\frac{4}{12}$ foot equals 4 inches. 36 inches + 4 inches = 40 inches.