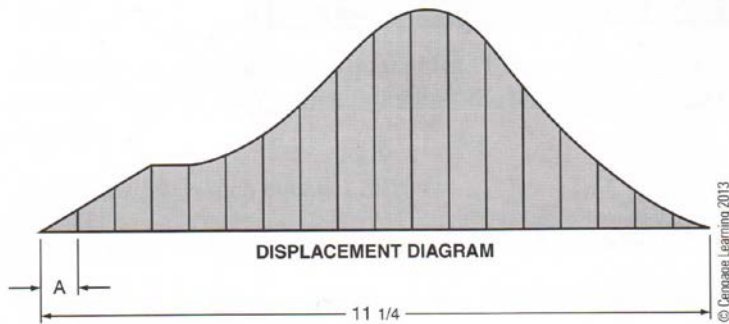


Name: _____
Mathematics Period 3

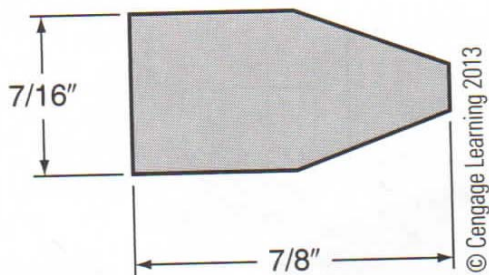
Date: 3/17/15
Ms. Wilson

Dividing Fractions to Solve Problems with CAD Drawings

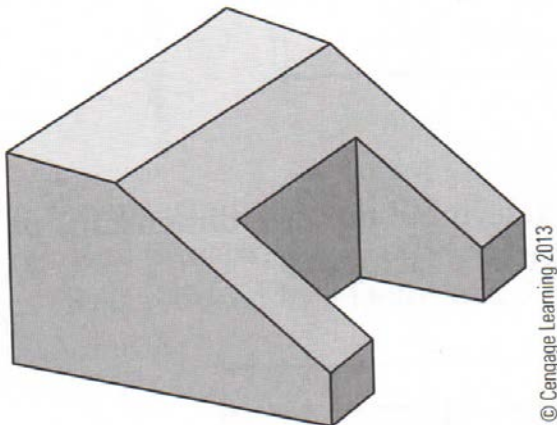
1.) Equal divisions in inches are drawn on this displacement diagram for a cam layout. Determine dimension A.



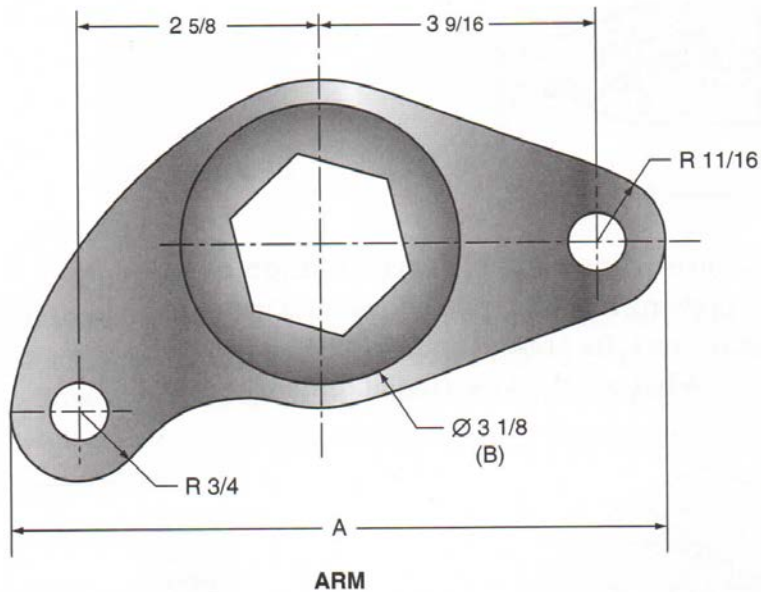
2.) A strip of $\frac{7}{16}$ -inch metal is 161 inches long. How many pieces, each $\frac{7}{8}$ -inch long, can be cut from it?



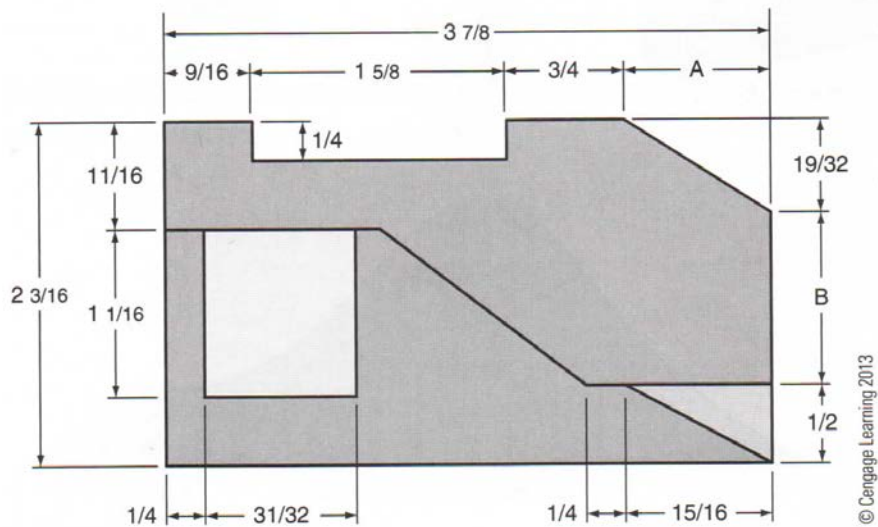
3.) An isometric drawing is a three-dimensional representation of an object. This isometric CAD drawing must be scaled down by a factor of 6 to make room for additional views. Its present height is $2\frac{1}{4}$ " , its width is $10\frac{1}{8}$ " , and its depth is $8\frac{1}{4}$ ". What are the new spatial dimensions in inches after scaling?



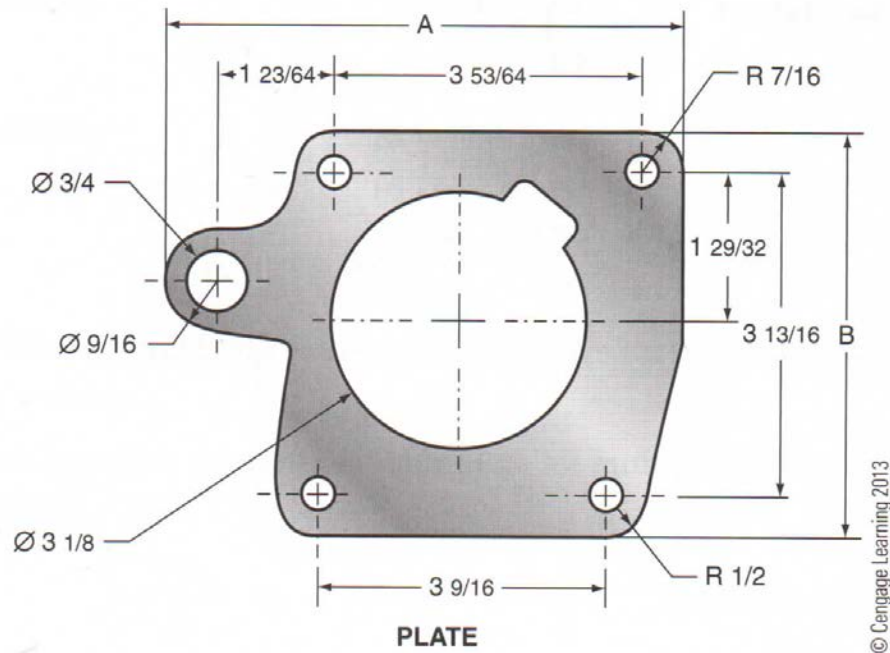
4.) The CAD drawing of the arm below is to be scaled down by a factor of 2. Determine the new dimensions of A and B after scaling.



5.) Use the CAD drawing below and determine the new dimensions of A and B if the drawing is scaled down by a factor of 5.



6.) A CAD operator inserts the CAD drawing of a plate as a symbol. During the insertion process, the X-axis (A) is reduced by a factor of 3, and the Y-axis (B) is reduced by a factor of 2. Calculate the new values of dimensions A and B.



7.) The CAD drawing of the marine gasket below must be reduced to $1/3$ its current size. Determine the reduced dimensions of features A through D.

