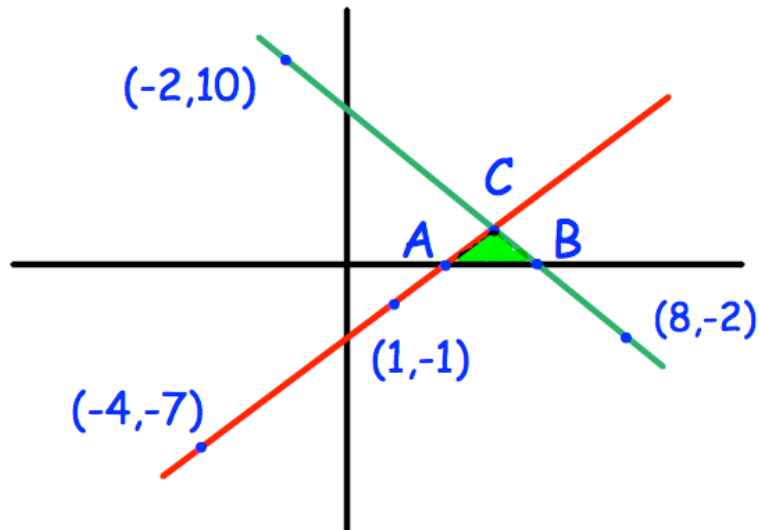


June 9<sup>th</sup>

Shown below are two straight lines.  
Find the area of triangle ABC.



Red line: gradient =  $6 \div 5 = 1.2$       Equation:  $y = 1.2x - 2.2$

Green line: gradient =  $-12 \div 10 = -1.2$       Equation:  $y = -1.2x + 7.6$

Point A is when  $1.2x = 2.2$        $x = \frac{11}{6}$

Point B is when  $1.2x = -7.6$        $x = \frac{19}{3}$

Point C is when  $1.2x - 2.2 = -1.2x + 7.6$

Hence  $2.4x = 9.8$

So  $x = \frac{49}{12}$  and  $y = \frac{27}{10}$

$AB = \frac{19}{3} - \frac{11}{6} = \frac{27}{6}$

Area =  $\frac{1}{2} \times \frac{27}{6} \times \frac{27}{10}$

**=  $\frac{729}{120}$**