

has value zero at $x = 1/2$ then $a = -4$ and to get the given value $\left| b\left(\frac{1}{2}\right) - 1 \right| = \frac{2}{3}$ so

$b = \frac{2}{3}$ or $\frac{10}{3}$. This gives possible locations for the other vertex of the graph as $x = 3/2$ and expression there is 4 or $x = 3/10$ and expression there is $4/5$ so both agree with stated minimum. Similarly if second expression is zero at $x = 1/2$ then $b = 2$ and $a = -16/3$, $x = 3/8$, expression is $1/4$, less than minimum; or $a = -8/3$, $x = 3/4$, expression is $1/2$, again less than minimum.

- F. If the first expression equals a then \ominus is either subtraction or division. If it is subtraction no substitute for \therefore works in the second identity so \ominus is division and \therefore must be addition. $8 + 6 / 2 = 11$