

Perfect Square trinomial

<p>Complete the Square</p> <p>Step #1 a-value has to equal 1</p> <p>Step #2 b-term Divide it by 2</p> <p>Step #3 Square answer from Step #2</p>	<p style="text-align: center;">7</p> <p>Find the value of c that <u>completes the square</u> Write your expression as a square of a binomial.</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>$x^2 + 12x + c$</p> <p>$x^2 + 12x + 36$</p> <p>$(x + 6)^2$</p> </div> <div style="width: 45%;"> <p>$x^2 - 6x + c$</p> <p>$x^2 - 6x + 9$</p> <p>$(x - 3)^2$</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>$x^2 - 15x + c$</p> <p>$x^2 - 15x + \frac{225}{4}$</p> <p>$(x - \frac{15}{2})^2$</p> </div> <div style="width: 45%;"> <p>$x^2 + 11x + c$</p> <p>$x^2 + 11x + \frac{121}{4}$</p> <p>$(x + \frac{11}{2})^2$</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>$x^2 - \frac{25}{13}x + c$</p> <p>$x^2 - \frac{25}{13}x + \frac{625}{169}$</p> <p>$(x - \frac{25}{26})^2$</p> </div> <div style="width: 45%;"> <p>$11 \div 2 = (\frac{11}{2})^2$</p> <p>$\frac{121}{4}$</p> </div> </div>
<p>$\frac{25}{13} \div 2$</p> <p>$\frac{25}{13} \cdot \frac{1}{2}$</p> <p>$(\frac{25}{26})^2$</p>	<p>Use completing the square to write each function in vertex form. Label the vertex and find the y-intercept.</p> <p>$f(x) = x^2 - 6x + 11$ $f(x) = x^2 - 2x - 9$</p>