Evaluate the following expressions, simplifying as completely as possible.

1. $5-2\left(20+\left(5-6^{2}\right)\right)$
2. $2 y^{2}-y+x^{-1}$ when $y=-3$ and $x=-1$
3. $2 x^{-2}(y+1)$ when $x=3$ and $y=-4$
4. $\frac{\left|-3^{2}+2\right|}{1-3 \cdot 4}$
