What is the negation of those propositions:
1. $\forall x \in E, P(x)$;
1. $\exists x \in E, \neg P(x)$;
2. $\exists x \in E, P(x)$;
2. $\forall x \in E, \neg P(x)$;
3. $\forall x \in E, \exists y \in E, P(x, y)$;
3. $\exists x \in E, \forall y \in E, \neg P(x, y)$;
4. $\exists x \in E, \forall y \in E, P(x, y)$;
4. $\forall x \in E, \exists y \in E, \neg P(x, y)$;
5. $\exists r \in \mathbb{R}, \exists s \in \mathbb{R}, \forall x \in \mathbb{R}, x \leq r$ and $s \leq r$.
5. $\forall r \in \mathbb{R}, \forall s \in \mathbb{R}, \exists x \in \mathbb{R}, x > r$ or $s > r$.