Answer on Queston #38925 – Economics – Microeconomics

Marginal rate of substitution is the rate at which a consumer is ready to give up one good in exchange for another good while maintaining the same level of utility. At consumption levels, our marginal rates of substitution are identical.

Under the standard assumption of neoclassical economics that goods and services are continuously divisible, the marginal rates of substitution will be the same regardless of the direction of exchange, and will correspond to the slope of an indifference curve (more precisely, to the slope multiplied by -1) passing through the consumption bundle in question, at that point: mathematically, it is the implicit derivative. MRS of X for Y is the amount of Y for which a consumer is willing to exchange X locally. The MRS is different at each point along the indifference curve thus it is important to keep locally in the definition. Further on this assumption, or otherwise on the assumption that utility is quantified, the marginal rate of substitution of good or service X for good or service Y (MRSxy) is also equivalent to the marginal utility of X over the marginal utility of Y. Formally, $MRS_{xy}=MU_x/MU_y$.

So, the right answer is B. Alison's marginal rate of substitution is higher than David's marginal rate of substitution.