Bob's public RSA key is $(285869,7)$ and your RSA values are $p=521, q=571, e=11$

1. Which if the following, if any, are valid RSA signatures from Bob?

$$
\begin{aligned}
& x=132136, \operatorname{sig}(x)=184316 \\
& x=132136, \operatorname{sig}(x)=176860 \\
& x=221821, \operatorname{sig}(x)=250076
\end{aligned}
$$

2. Suppose you want to send the message $x=34372$ to Bob. Encrypt it using Bob's public RSA key and sign it using your RSA values. What do you send to Bob?
