

**25**

$$\frac{4+i}{5-i} = \frac{4+i}{5-i} \cdot \frac{5+i}{5+i} = \frac{(4+i)(5+i)}{(5-i)(5+i)} = \frac{20+9i+i^2}{25-i^2} = \frac{19+9i}{26} = \frac{19}{26} + \frac{9}{26}i$$