

$$z + 2u = 3 - 2i + 2(5 - 3i) = 13 - 8i$$

$$2\bar{z} - z = 2(3 + 2i) - (3 - 2i) = 3 + 6i$$

Så

$$\frac{z + 2u}{2\bar{z} - z} = \frac{13 - 8i}{3 + 6i} = \frac{(13 - 8i)(3 - 6i)}{(3 + 6i)(3 - 6i)} =$$

$$= \frac{39 - 78i - 24i - 48}{9 + 36} = \frac{-9 - 102i}{45} =$$

$$= -\frac{1}{5} - \frac{34}{15}i$$

Fel i facit!