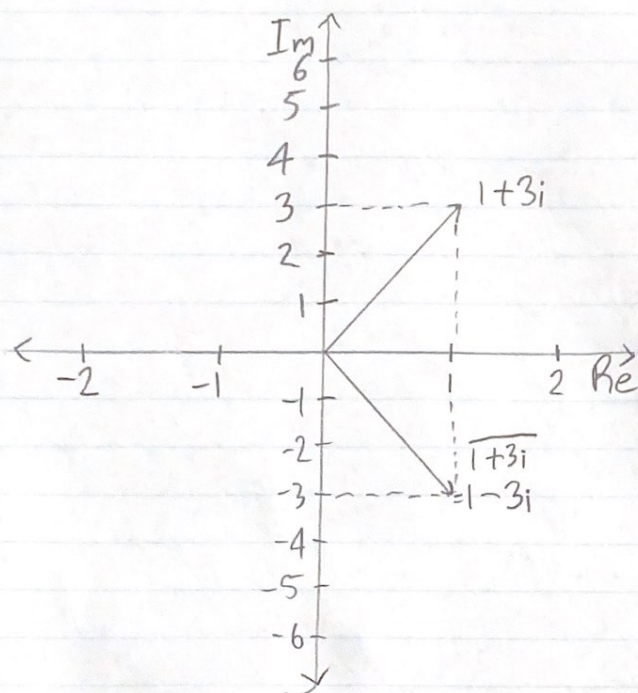


1)



$$2a) 3+2i+4-3i-6+5i \\ = 1+4i$$

$$f) \overline{6-5i} \\ = 6+5i$$

$$b) -2(3+2i) \\ = -6-4i$$

$$g) = \frac{(6-5i)}{3+2i} \times \frac{(3-2i)}{3-2i} \\ = \frac{18-12i-15i+10i^2}{3^2+2^2} \\ = \frac{8-27i}{13}$$

$$c) i(3+2i) \\ = 3i+2i^2 \\ = -2+3i$$

$$d) (3+2i)(4-3i) \\ = 12-9i+8i-6i^2 \\ = 18-i$$

$$h) \operatorname{Re}(4-3i) \\ = 4$$

$$e) i^{58} \\ 58 \div 4 = 14 \text{ R } 2 \\ \therefore i^{58} = -1$$

$$i) \operatorname{Im}(6-5i) \\ = -5i$$

$$3) |(4-3i)^2|$$

$$= |16 - 12i - 12i + 9i^2|$$

$$= |7 - 24i|$$

$$= \sqrt{7^2 + (-24)^2}$$

$$= \sqrt{625}$$

$$= 25$$