Complex Numbers

Divide

1. $\dfrac{4+3i}{5+3i}$

2. $\dfrac{9+i}{9-i}$

3. $\dfrac{1+i}{1-i}$

4. $\dfrac{9+5i}{1+i}$

5. $\dfrac{1-3i}{3+i}$

6. $\dfrac{(3-i)}{(-3+i)}$

7. $\dfrac{(5i+5)(-2i-3)}{i-2}$

8. $\left(\dfrac{3-i}{2+i}\right)^2$

9. $\dfrac{1+i}{(2-i)^2}$

10. $\left(\dfrac{(4-3i)}{(2+i)}\right)+\left(\dfrac{(4+3i)}{(2-i)}\right)$

Answers

Complex Numbers

Divide

1. $\dfrac{29}{34} + \dfrac{3}{34}i$

2. $\dfrac{40}{41} + \dfrac{9}{41}i$

3. i

4. $7 - 2i$

5. $-i$

6. -1

7. $-3 + 11i$

8. $-2i$

9. $-\dfrac{1}{25} + i\dfrac{7}{25}$

10. 2