

1. Simplify:  $\frac{5+3i}{8+7i}$

[A]  $\frac{61}{113} - \frac{11}{113}i$       [B]  $\frac{61}{113} + \frac{11}{113}i$       [C]  $-\frac{61}{113} - \frac{11}{113}i$       [D]  $-\frac{61}{113} + \frac{11}{113}i$

2. Simplify:  $\frac{3+2i}{10+3i}$

[A]  $\frac{36}{109} + \frac{11}{109}i$       [B]  $-\frac{36}{109} + \frac{11}{109}i$       [C]  $-\frac{36}{109} - \frac{11}{109}i$       [D]  $\frac{36}{109} - \frac{11}{109}i$

3. Simplify:  $\frac{6+i}{1+2i}$

[A]  $-\frac{8}{5} - \frac{11}{5}i$       [B]  $\frac{8}{5} - \frac{11}{5}i$       [C]  $\frac{8}{5} + \frac{11}{5}i$       [D]  $-\frac{8}{5} + \frac{11}{5}i$

4. Simplify:  $\frac{1+5i}{9+5i}$

[A]  $-\frac{17}{53} + \frac{20}{53}i$       [B]  $-\frac{17}{53} - \frac{20}{53}i$       [C]  $\frac{17}{53} + \frac{20}{53}i$       [D]  $\frac{17}{53} - \frac{20}{53}i$

5. Simplify:  $\frac{9-i}{5+9i}$

[A]  $-\frac{18}{53} - \frac{43}{53}i$       [B]  $\frac{18}{53} + \frac{43}{53}i$       [C]  $\frac{18}{53} - \frac{43}{53}i$       [D]  $-\frac{18}{53} + \frac{43}{53}i$

6. Simplify:  $\frac{8+5i}{2+i}$

[A]  $\frac{21}{5} + \frac{2}{5}i$       [B]  $\frac{21}{5} - \frac{2}{5}i$       [C]  $-\frac{21}{5} + \frac{2}{5}i$       [D]  $-\frac{21}{5} - \frac{2}{5}i$

7. Simplify:  $\frac{9+2i}{7+4i}$

[A]  $-\frac{71}{65} - \frac{22}{65}i$       [B]  $-\frac{71}{65} + \frac{22}{65}i$       [C]  $\frac{71}{65} - \frac{22}{65}i$       [D]  $\frac{71}{65} + \frac{22}{65}i$

8. Simplify:  $\frac{5-4i}{6+7i}$

[A]  $-\frac{2}{85} + \frac{59}{85}i$     [B]  $-\frac{2}{85} - \frac{59}{85}i$     [C]  $\frac{2}{85} - \frac{59}{85}i$     [D]  $\frac{2}{85} + \frac{59}{85}i$

9. Simplify:  $\frac{7-3i}{8+3i}$

[A]  $\frac{47}{73} - \frac{45}{73}i$     [B]  $-\frac{47}{73} + \frac{45}{73}i$     [C]  $-\frac{47}{73} - \frac{45}{73}i$     [D]  $\frac{47}{73} + \frac{45}{73}i$

10. Simplify:  $\frac{1-5i}{1+8i}$     [A]  $\frac{3}{5} - \frac{1}{5}i$     [B]  $-\frac{3}{5} - \frac{1}{5}i$     [C]  $\frac{3}{5} + \frac{1}{5}i$     [D]  $-\frac{3}{5} + \frac{1}{5}i$

11. Simplify:  $(-8-7i)(5-6i)$

12. Simplify:  $(-3-4i)(-2+i)$

13. Simplify:  $(-3-7i)(2+8i)$

14. Simplify:  $(-4+5i)(6-i)$

15. Simplify:  $(-5+4i)(3-i)$

16. Simplify:  $(7-6i)(8-2i)$

17. Simplify:  $(-6-7i)(-5+3i)$

18. Simplify:  $(1+8i)(2+4i)$

19. Simplify:  $(7+5i)(4+2i)$

20. Simplify:  $(8+6i)(1-3i)$