

Unit 5.2 Rationalize Denominator with Complex numbers Example

Period _____

Simplify. Write your answer as one fraction, (not as two fractions).

1) $\frac{4}{-10i}$

2) $\frac{1}{9i}$

3) $\frac{4}{-7i}$

4) $\frac{8}{-2i}$

5) $-\frac{4}{5i}$

6) $\frac{3}{9i}$

7) $\frac{4}{-3i}$

8) $\frac{7}{2i}$

9) $\frac{-9 + 6i}{5i}$

10) $\frac{4 - 5i}{7i}$

11) $\frac{2 - 3i}{7i}$

12) $\frac{-4 + 7i}{5i}$

13) $\frac{-7 + 7i}{7i}$

14) $\frac{-4 + 7i}{-8i}$

15) $\frac{-1 - 5i}{10i}$

16) $\frac{4 - 4i}{6i}$

17) $\frac{10 + 7i}{-4 + 7i}$

18) $\frac{7 - 3i}{-6 + 3i}$

19) $\frac{-9 - 3i}{-8 - 3i}$

20) $\frac{9 - 2i}{-4 - 9i}$

21) $\frac{-5 - 9i}{-9 - 5i}$

22) $\frac{-6 - 2i}{8 + 7i}$

23) $\frac{-3 - 7i}{10 - 5i}$

24) $\frac{1 + i}{-9 + 2i}$

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Period _____

Simplify. Write your answer as one fraction, (not as two fractions).

1) $\frac{4}{-10i}$

$\frac{2i}{5}$

2) $\frac{1}{9i}$

$-\frac{i}{9}$

3) $\frac{4}{-7i}$

$\frac{4i}{7}$

4) $\frac{8}{-2i}$

$4i$

5) $-\frac{4}{5i}$

$\frac{4i}{5}$

6) $\frac{3}{9i}$

$-\frac{i}{3}$

7) $\frac{4}{-3i}$

$\frac{4i}{3}$

8) $\frac{7}{2i}$

$-\frac{7i}{2}$

9) $\frac{-9 + 6i}{5i}$

$\frac{9i + 6}{5}$

10) $\frac{4 - 5i}{7i}$

$\frac{-4i - 5}{7}$

11) $\frac{2 - 3i}{7i}$

$\frac{-2i - 3}{7}$

12) $\frac{-4 + 7i}{5i}$

$\frac{4i + 7}{5}$

$$13) \frac{-7 + 7i}{7i}$$

$$i + 1$$

$$14) \frac{-4 + 7i}{-8i}$$

$$\frac{-4i - 7}{8}$$

$$15) \frac{-1 - 5i}{10i}$$

$$\frac{i - 5}{10}$$

$$16) \frac{4 - 4i}{6i}$$

$$\frac{-2i - 2}{3}$$

$$17) \frac{10 + 7i}{-4 + 7i}$$

$$\frac{9 - 98i}{65}$$

$$18) \frac{7 - 3i}{-6 + 3i}$$

$$\frac{-17 - i}{15}$$

$$19) \frac{-9 - 3i}{-8 - 3i}$$

$$\frac{81 - 3i}{73}$$

$$20) \frac{9 - 2i}{-4 - 9i}$$

$$\frac{-18 + 89i}{97}$$

$$21) \frac{-5 - 9i}{-9 - 5i}$$

$$\frac{45 + 28i}{53}$$

$$22) \frac{-6 - 2i}{8 + 7i}$$

$$\frac{-62 + 26i}{113}$$

$$23) \frac{-3 - 7i}{10 - 5i}$$

$$\frac{1 - 17i}{25}$$

$$24) \frac{1 + i}{-9 + 2i}$$

$$\frac{-7 - 11i}{85}$$