

Complex Number Color by Number

Date _____ Period _____

1) $\sqrt{-16}$

- A) $\pm 4i$ (Brown) B) -16 (Grey)
 C) -4 (Black) D) 4 (Yellow)

2) $\sqrt{-72}$

- A) 72 (Blue)
 B) -72 (Purple)
 C) $\pm i\sqrt{72}$ (Green)
 D) $\pm 6i\sqrt{2}$ (Pink)

3) $\sqrt{-128}$

- A) ± 8 (Pink)
 B) $\pm 8i$ (Blue)
 C) $\pm 8i\sqrt{2}$ (Purple)
 D) -128 (Green)

Simplify.

4) $-2i - 7i$

- A) -1 (Pink) B) $-9i$ (Blue)
 C) $5i$ (Green) D) $-23i$ (Purple)

5) $-5i - 4i$

- A) $-i$ (Blue)
 B) $-9i$ (Red)
 C) $-6 - 5i$ (Green)
 D) i (Pink)

6) $(-8 + 6i) + (6 + i)$

- A) $-2 + 5i$ (Red)
 B) $1 + 6i$ (Black)
 C) $-14 + 7i$ (Brown)
 D) $-2 + 7i$ (Pink)

7) $(-6 + 2i) + (-1 - i)$

- A) $-5 + i$ (Blue)
 B) $-5 + 3i$ (Red)
 C) -6 (Yellow)
 D) $-7 + i$ (Green)

8) $-3i \cdot -2i$

- A) -6 (White) B) 6 (Red)
 C) $10i$ (Blue) D) $2i$ (Green)

9) $(2i)^2$

- A) 1 (White)
 B) 4 (Light Green)
 C) $-10i$ (Light Purple)
 D) -4 (Light Blue)

10) $(-2 + 3i)(-2 + 3i)$

- A) 13 (Pink)
 B) $-5 - 12i$ (Black)
 C) -13 (Orange)
 D) $5 - 12i$ (Brown)

11) $(1 - 8i)(2 - 5i)$

- A) $38 - 21i$ (Yellow)
 B) $-38 - 21i$ (Green)
 C) $-39 - 13i$ (Blue)
 D) $42 - 11i$ (Brown)

12) $(6 + 7i)(-3 - i)$

- A) $-25 - 15i$ (Yellow)
 B) $-11 - 27i$ (Orange)
 C) $11 - 27i$ (Brown)
 D) $25 - 15i$ (Black)

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

- A) $-\frac{9}{26} + \frac{45i}{26}$ (Pink)
 B) $-\frac{1}{2} + \frac{5i}{2}$ (Red)
 C) $-\frac{5}{13} + \frac{25i}{13}$ (Purple)
 D) $-\frac{5}{13} + \frac{25i}{18}$ (Yellow)

14) $\frac{5}{10 + 9i}$

- A) $\frac{4}{15} - \frac{i}{5}$ (Black)
 B) $\frac{50}{181} - \frac{45i}{181}$ (Red)
 C) $\frac{5}{18} - \frac{5i}{18}$ (Navy Blue)
 D) $\frac{30}{181} - \frac{27i}{181}$ (Grey)

15) $\frac{4i}{10 + 4i}$

- A) $\frac{4i}{11}$ (Grey)
 B) $\frac{4i}{13}$ (Yellow)
 C) $\frac{4}{29} + \frac{10i}{29}$ (White)
 D) $\frac{16}{65} + \frac{28i}{65}$ (Black)