

COLLEGE ALGEBRA QUIZ

- (1) Express $-\sqrt{-50}$ in terms of i
Solution: $-5i\sqrt{2}$.
- (2) Express $\sqrt{-18} \cdot \sqrt{-20}$ in terms of i
Solution: $-6\sqrt{10}$.
- (3) Express $\frac{\sqrt{-36}}{-\sqrt{-49}}$ in terms of i
Solution: $\frac{-6}{7}$.
- (4) Simplify $(8 + 2i) + (-5 - 4i)$ and write the answer in the form, $a + bi$ where a and b are real numbers.
Solution: $3 - 2i$
- (5) Simplify $(5 - 6i) - (4 - i)$ and write the answer in the form, $a + bi$ where a and b are real numbers.
Solution: $1 - 5i$
- (6) Simplify $(6 + 3i)(-4 - 2i)$ and write the answer in the form, $a + bi$ where a and b are real numbers.
Solution: $-18 - 24i$
- (7) Simplify $\frac{2-7i}{1-5i}$ and write the answer in the form, $a + bi$ where a and b are real numbers.
Solution: $\frac{37}{26} + \frac{3}{26}i$
- (8) Simplify i^{58} and write the answer in the form, $a + bi$ where a and b are real numbers.
Solution: -1