# Multiplying Complex Numbers

MATH MONKS

Simplify. Answers must be written in standard form (a + bi).

① $6i(-8 + 3i)$

② $i(4 + 3i)^2$

③ $-11i(3 + 9i)$

④ $(i)(2i)(-7i)$

⑤ $5(-i)(-4 + 6i)$

⑥ $(6 - 5i)(6 - 5i)$

⑦ $(7 - 6i)(-8 + 3i)$

⑧ $(-2 - 3i)(7 + 7i)$

⑨ $(-8 - 7i) - (5 - 4i)$

⑩ $(-6i)(8 - 6i)(-8 - 8i)$

⑪ $(7i)(6i)(-3 - 5i)$

⑫ $(6 + 3i)(7 - i)$

# Multiplying Complex Numbers

MATH MONKS

Answers.

① $6i(-8 + 3i)$

Ans: $48i - 18i$

② $i(4 + 3i)^2$

Ans: $24 + 3i$

③ $-11i(3 + 9i)$

Ans: $99 - 33i$

④ $(i)(2i)(-7i)$

Ans: $14i$

⑤ $5(-i)(-4 + 6i)$

Ans: $24$

⑥ $(6 - 5i)(6 - 5i)$

Ans: $31 + 36i$

⑦ $(7 - 6i)(-8 + 3i)$

Ans: $-38 + 69i$

⑧ $(-2 - 3i)(7 + 7i)$

Ans: $7 - 35i$

⑨ $(-8 - 7i) - (5 - 4i)$

Ans: $-13 - 3i$

⑩ $(-6i)(8 - 6i)(-8 - 8i)$

Ans: $-96 + 672i$

⑪ $(7i)(6i)(-3 - 5i)$

Ans: $126 + 210i$

⑫ $(6 + 3i)(7 - i)$

Ans: $45 + 15i$