

N.CN.A.2: Imaginary Numbers 2

- 1 The value of $2i^8$ is equivalent to
1) $2i$ 2) 2 3) -2 4) $-2i$
- 2 The expression i^{10} is equivalent to
1) 1 2) i 3) -1 4) $-i$
- 3 The value of i^{16} is
1) 1 2) -1 3) i 4) $-i$
- 4 Which expression is equivalent to i^{37}
1) 1 2) -1 3) i 4) $-i$
- 5 When simplified, i^{99} is equivalent to
1) 1 2) -1 3) i 4) $-i$
- 6 Which expression is equivalent to i^{233}
1) 1 2) -1 3) i 4) $-i$
- 7 If i is the imaginary unit, the expression $i^8 + i^9 + i^{10} + i^{11}$ is equivalent to
1) 1 2) -1 3) i 4) 0
- 8 The product $i^3 \cdot i^7$ is
1) 1 2) -1 3) i 4) $-i$
- 9 The expression $i^2(2-i)$ is equivalent to
1) $-2-i$ 2) $-2+i$ 3) $2-i$ 4) $2+i$
- 10 What is the value of $(5i^3)^3$?
1) $-125i$ 2) $125i$ 3) $-15i$ 4) $15i$
- 11 If $f(x) = x^2$, what is the value of $f(i^3)$?
1) 1 2) -1 3) i 4) $-i$
- 12 If $f(x) = x^2$, what is the value of $f(2i)$?
1) -2 2) 2 3) -4 4) 4
- 13 If $f(x) = x^2 + 2$, what is the value of $f(3i)$?
1) 11 2) 8 3) -7 4) -4

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Answer Section

1	ANS: 2	REF: 069135siii
2	ANS: 3	REF: 069527siii
3	ANS: 1	REF: 018631siii
4	ANS: 3	REF: 080327siii
5	ANS: 4	REF: 089830siii
6	ANS: 3	REF: 010334siii
7	ANS: 4	REF: 060331siii
8	ANS: 2	REF: 088423siii
9	ANS: 2	REF: 069925siii
10	ANS: 2	REF: 060224siii
11	ANS: 2	REF: 010034siii
12	ANS: 3	REF: 080128siii
13	ANS: 3	REF: 019133siii