NAME:_____

A2.N.6: Write square roots of negative numbers in terms of i

1. 060215b, P.I. A2.N.6
What is the sum of $\sqrt{-2}$ and $\sqrt{-18}$?

[A] $6i$ [B] $4i\sqrt{2}$

[C] $2i\sqrt{5}$ [D] $5i\sqrt{2}$

2. 080507b, P.I. A2.N.6
When expressed as a monomial in terms of i, $2\sqrt{-32}-5\sqrt{-8}$ is equivalent to

[A] $18i\sqrt{2}$ [B] $2\sqrt{2i}$

[C] $-2i\sqrt{2}$ [D] $2i\sqrt{2}$

3. 060401b, P.I. A2.N.6
What is the sum of $2-\sqrt{-4}$ and $-3+\sqrt{-16}$ expressed in simplest $a + bi$ form?

[A] $-1+2i$ [B] $-1+12i$

[C] $-14+i$ [D] $-1+i\sqrt{20}$

4. 080422b, P.I. A2.N.6
Express $\sqrt{-48}+3.5+\sqrt{25}+\sqrt{-27}$ in simplest $a + bi$ form.

5. 080314b, P.I. A2.N.6
What is the product of $5+\sqrt{-36}$ and $1-\sqrt{-49}$, expressed in simplest $a + bi$ form?

[A] 47 - 29i [B] -37 + 41i

[C] 47 + 41i [D] 5 - 71i

6. 080816b, P.I. A2.N.6
The expression $\frac{\sqrt{-50}}{\sqrt{2}}$ is equivalent to

[A] -5i [B] 5 [C] 5i [D] -5

A2.N.6: Write square roots of negative numbers in terms of i

[1] B

[2] C

[3] A

[4] [2] $8.5 + 7i\sqrt{3}$, and appropriate work is shown.
[1] Appropriate work is shown, but one computational error is made.
or [1] Appropriate work is shown, but one conceptual error is made.
or [1] $8.5 + 7i\sqrt{3}$, but no work is shown.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

[5] A

[6] C