

Complex Number System - Key

In problems 1-2, write each expression as a pure imaginary number.

1. $5i$	2. $2i\sqrt{15}$
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In problems 3-4, write each expression as a complex number in standard form.

3. $\frac{3}{5} + \frac{\sqrt{5}}{5}i$	4. $\frac{1}{2} - \frac{3}{2}i$
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In problems 5-20, perform the indicated operation.

5. $11 + 3i$	6. 11
7. $-5 + i$	8. $2 - 6i$
9. $9 - 2i$	10. $23 - 37i$
11. $24 + 10i$	12. $-12 - 16i$
13. $8 - 24i$	14. $-4\sqrt{15}$
15. $-1 - 10i$	16. $\frac{15}{13} - \frac{10}{13}i$
17. $1 + 5i$	18. $-i$
19. $-i$	20. $-i$