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“Why did Jimmy do well on the Math test after drinking orange juice?”

On #1-11, simplify each expression, then on #12-17 solve each equation. The answer to each problem will match a letter that will allow you to figure out the joke.

Simplify.

1. $\sqrt{-49}$

2. $-\sqrt{-100}$

3. $3\sqrt{-18}$

4. $-5\sqrt{-9}$

5. $3 + \sqrt{-25}$

6. $(3 + 2i) + (2 + 7i)$

7. $(4 - 5i) - (-10 + 3i)$

8. $2(3 + 6i) - 3(7-5i)$

9. $(2 + \sqrt{-25}) + (-8 - \sqrt{-9})$

10. $(3 - 5\sqrt{-7}) - (4 + 3\sqrt{-7})$

11. $(2 - 7\sqrt{-18}) + (-3 + 4\sqrt{-50})$

Solve.

12. $x^2 = -81$

13. $x^2 = -2$

14. $x^2 + 49 = 0$

15. $x^2 + 50 = 2$

16. $3x^2 + 12 = x^2 - 20$

17. $5(x^2 - 4) = 3(2x^2 + 6)$

$14 - 8i$	$-10i$	$\pm 9i$	$-15 + 27i$	$\pm 4i$	$-15i$	$3 + 5i$	$-1 - i\sqrt{2}$	$\pm 7i$
E	E	R	S	W	N	A	T	D
$\pm i\sqrt{2}$	$9i\sqrt{2}$	$-1 - 8i\sqrt{7}$	$7i$	$\pm i\sqrt{38}$	$-6 + 2i$	$\pm 4i\sqrt{3}$	$5 + 9i$	
H	T	C	N	A	E	C	O	

13 2 16 5 8 10 6 4 15 9 1 11 12 17 3 7 14

Simplifying and solving with complex numbers

Joke 9

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