Quote actually should be (in green)

Imaginary Numbers Day 2 HW Puzzle

I'm ? concerned

Concerned (5) not (21) I'm (6) with (4) your (13) liking (11) or (12)

disliking (2) me (7) .... all (14) I (15) ask (19) storm (3) that (20) you (17)

respect (9) me (8) as (10) a (18) storm (16) Being (1) . – Jackie (22) Robinson (23)

human

Simplify

1) $\sqrt{-49} = 7i$ — $\sqrt{49}\sqrt{-1}$

2) $\sqrt{-48} = 4i\sqrt{3}$ — $= \sqrt{16}\sqrt{3}\sqrt{-1}$

3) $\left(\sqrt{-5}\right)^2 = -5$ — lift radical

4) $\sqrt{-45} = \sqrt{9}\sqrt{5}\sqrt{-1} = 3i\sqrt{5}$

5) $i^{42} = i^2 = -1$ — $4\overline{)42}$ 10 r 2, 40, 2

6) $i^{56} = 1$ — $4\overline{)56}$ 14 r 0, −4, 16

7) $i^{33} = i$ — $4\overline{)33}$ 8 r 1, −32, 1

8) $-(-i-2)$ — $i+2 = 2+i$

9) $i^{44}\cdot i^2\cdot i = i^3 = -i$ — i^{47}, $4\overline{)47}$ 11 r 3, 4, 7

10) $12i\cdot 6i$ — $72i^2 = -72$

11) $7i^3\cdot 6i^2$ — $42i^4 = 42$

12) $3i^7\cdot 5i^{11}$ — $15\,i^{18} = -15$; $4\overline{)18}$ 4 r 2, 16, 2

13) $7i+9+14-23i$ — $23-16i$

14) $\dfrac{3i\sqrt{-6}}{\sqrt{-6}}$: $3i$

15) $(3i)^2 = 9i^2 = -9$

16) $(-2i)^3 = (-2)^3 i^3 = (-8)(-i) = 8i$

17) $\sqrt{-125}+4$ — $\sqrt{25\cdot 5(-1)}+4 = 4+5i\sqrt{5}$

18) $i^2+i^2 = 2i^2 = -2$

19) $i+3i^2$ — $i-3 = -3+i$

20) $\sqrt{-8}\cdot\sqrt{-2}$ — $\sqrt{-1\cdot 4\cdot 2}\ \sqrt{-1\cdot 2} = -1\cdot 2\cdot 2 = -4$

21) $i+\sqrt[3]{-8}$ — $-2+i$

22) $\left(\sqrt{-7}\right)^4 = 49$ — $\sqrt{-7}\ \sqrt{-7}\ \sqrt{-7}\ \sqrt{-7}$; 7; −7

23) $\left(\sqrt{-7}\right)^3$ — $\sqrt{-7}\ \sqrt{-7}\ \sqrt{-7} = -7i\sqrt{7}$; $-7\sqrt{-7}$

ANSWER BANK

−2	a	3i	all	$-7i\sqrt{7}$	Robinson
−4	that	−3i	weird	$3i\sqrt{6}$	me
−9	I	2i	human	$3i\sqrt{5}$	with
−15	or	4i	apple	$4i\sqrt{3}$	disliking
−5	storm	−2i	robot	$23-16i$	your
−72	as	7i	being	$4-25i$	baseball
0	friend	−7i	love	$4+5i\sqrt{5}$	you
	bold	8i	storm	1	I'm
	high	−8i	isn't	−1	concerned
9	sun	$-2+i$	not	i	me
15	Smokey	$2+i$	me	$-i$	respect
42	liking	$-3+i$	ask		
49	Jackie				