

1. LinReg gives $a = 3$, $b = 2$ in $y = a + bx$. Write the line.

$y = a + bx$ form

Answer: $y = 3 + 2x$

2. A regression is $y = -56.97x + 2352.22$ (Trainer echo - Jan 2026 Q33). Slope?

Coefficient of x

Answer: -56.97

3. Same line: predict y when $x = 10$.

$-56.97(10) + 2352.22$

Answer: about 1782.52

4. Steps to run LinReg on the TI-Nspire: name lists, then which menu?

Statistics > Stat Calculations

Answer: Linear Regression ($a+bx$)

5. Regression $y = 4x + 20$. Interpret the slope 4 in context (cost per item).

Slope = rate

Answer: cost rises \$4 per item

6. Interpret the y -intercept 20 in $y = 4x + 20$ (a startup fee).

Value at $x = 0$

Answer: \$20 base/starting cost

7. A line of best fit predicts 85 but the actual value was 80. Predicted vs actual?

Model over-predicted

Answer: over by 5

8. Data pairs: (1,5),(2,7),(3,9),(4,11). Without a calculator, what is the exact line?

Perfectly linear: slope 2, int 3

Answer: $y = 2x + 3$

9. You run LinReg and get $r = 0.98$ (Trainer echo - Aug 2025 Q12). Direction and strength? ★ challenge

Near +1

Answer: strong positive

10. Data: (0,50),(1,45),(2,40),(3,35). Find the exact regression line and predict $x = 6$. ★ challenge

Slope -5, int 50

$-5(6)+50$

Answer: $y = -5x + 50$; predicts 20