

Tuesday, Oct 20th

p54

#6

$$\begin{array}{r} \frac{+}{\overline{25}} \\ + 37 \\ \hline 62 \end{array}$$

$$(+25) + (+37) + (-8) + (-9) + (-6)$$

$$25 + 37 + -8 + -9 + -6$$

$$62 + -8 + -9 + -6$$

$$54 + -9 + -6$$

$$45 + -6$$

$$(39)$$

Review: Natural Number Sequences

ex #1 What are the first 3 terms
of the sequence with
the rule $t = 2n + 4$,
Starting with $n=1$

$$\underline{n=1}$$

$$t = 2(1) + 4$$

$$t = 2 + 4$$

$$t = 6$$

$$\underline{n=2}$$

$$t = 2(2) + 4$$

$$t = 4 + 4$$

$$t = 8$$

$$\underline{n=3}$$

$$t = 2(3) + 4$$

$$t = 6 + 4$$

$$t = 10$$

$$S = \{ 6, 8, 10, \dots \}$$

the seq.
continues

ex#2

What is the term with $r=4$
of the rule

$$t = 2r + 4$$

$$t = 2(4) + 4$$

$$t = 8 + 4$$

$$t = 12$$

ex

Miss Grewel has a debt of \$5,

and Anthony has a debt
of \$500.

Who owes the bank more money?

Anthony

What does \mathbb{Z} \rightarrow all integers

- neg #'s
- pos #'s
- 0
- only whole #'s

\mathbb{Z}^* : no 0

\mathbb{Z}_+^* : nonneg
only pos.

\mathbb{Z}_-^* : - neg
- 0
- no pos.

$$\text{Find } (-2)^3 = -2 \cdot -2 \cdot -2 \\ = -8$$

$$(-2)^2 = 4$$

$$(-2)^4 = (-2 \cdot -2 \cdot -2 \cdot -2) \\ = 16$$

$$(-2)^3 = (-2 \cdot -2 \cdot -2) \\ = -8 \quad -2^2 = -4 \rightarrow -(2)^2 \\ -2^4 = -16$$