

§1-6 Reasoning to Solve Problems (p45)

⇒ Solve problems using inductive or deductive reasoning

INVESTIGATE the Math

Number trick: choose a number
 multiply by 6
 add 4
 divide by 2
 subtract 2

Make a conjecture about the relationship between the starting number and final #.

Inductive Reasoning

#	x 6	+ 4	÷ 2	- 2
5	30	34	17	15
-3	-18	-14	-7	-9
0	0	4	2	0
24	144	148	74	72



Conjecture: The final # is three times the starting #.

↖ appears as though the final # is three times the starting #.

Deductive Reasoning

$$\left(\frac{6n+4}{2}\right) - 2 = (3n+2) - 2$$

$$= 3n$$

Proved deductively that the final # is three times the original #.

After Quiz:

TO DO

- ① Look over Example 1 (p46) - handshakes.
 Example 2 (p47) - seating plan
- ② C4u/p48-49
- ③ p49/3-16