

PA4-6: Increasing and Decreasing Sequences

1. Extend the patterns, using the "gap" provided.

Example 1:

$$6, \overset{+1}{\circ}, 7, \underline{8}, \underline{9}$$

a) $5, \overset{+5}{\circ}, 10, \underline{\quad}, \underline{\quad}, \underline{\quad}$

c) $3, \overset{+3}{\circ}, 6, \underline{\quad}, \underline{\quad}, \underline{\quad}$

e) $12, \overset{+2}{\circ}, 14, \underline{\quad}, \underline{\quad}, \underline{\quad}$

g) $14, \overset{-1}{\circ}, 13, \underline{\quad}, \underline{\quad}, \underline{\quad}$

Example 2:

$$8, \overset{-2}{\circ}, 6, \underline{4}, \underline{2}$$

b) $1, \overset{+3}{\circ}, 4, \underline{\quad}, \underline{\quad}, \underline{\quad}$

d) $6, \overset{+2}{\circ}, 8, \underline{\quad}, \underline{\quad}, \underline{\quad}$

f) $10, \overset{+5}{\circ}, 15, \underline{\quad}, \underline{\quad}, \underline{\quad}$

h) $16, \overset{-2}{\circ}, 14, \underline{\quad}, \underline{\quad}, \underline{\quad}$

2. Extend the patterns by first finding the "gap".

Example:

$$3, \circ, 5, \circ, 7, \underline{\quad}$$

Step 1:

$$3, \overset{+2}{\circ}, 5, \overset{+2}{\circ}, 7, \underline{\quad}$$

a) $5, \circ, 8, \circ, 11, \underline{\quad}, \underline{\quad}$

c) $6, \circ, 10, \circ, 14, \underline{\quad}, \underline{\quad}$

e) $21, \circ, 24, \circ, 27, \underline{\quad}, \underline{\quad}$

g) $25, \circ, 23, \circ, 21, \underline{\quad}, \underline{\quad}$

Step 2:

$$3, \overset{+2}{\circ}, 5, \overset{+2}{\circ}, 7, \underline{9}$$

b) $2, \circ, 4, \circ, 6, \underline{\quad}, \underline{\quad}$

d) $1, \circ, 3, \circ, 5, \underline{\quad}, \underline{\quad}$

f) $12, \circ, 17, \circ, 22, \underline{\quad}, \underline{\quad}$

h) $59, \circ, 54, \circ, 49, \underline{\quad}, \underline{\quad}$

BONUS:

3.  Rachel has a box of 24 pears.
She eats 3 each day.

How many are left after 5 days? _____

4. Emi has saved \$17. She saves an additional \$4 each day.
How much money has she saved after 4 days? _____