

ARITHMETIC SEQUENCE AS LINEAR FUNCTIONS

Direction: Solve each question and use the color of the answer for each question to color the picture accordingly.

Write an equation for the n th term of each arithmetic sequence.

1) 7, 13, 19, 25, ...	Light brown: $a_n = 7n - 4$ Purple: $a_n = 4n + 5$	Pink: $a_n = 6n + 1$ Brown: $a_n = 3n + 5$
2) 30, 26, 22, 18, ...	Light blue: $a_n = -4n + 46$ Red: $a_n = -4n - 34$	Orange: $a_n = n - 34$ Light Green: $a_n = -4n + 34$
3) -7, -4, -1, 2, ...	Red: $a_n = 3n - 10$ Purple: $a_n = -3n + 1$	Yellow: $a_n = 5n - 20$ Brown: $a_n = 2n + 3$
4) 9, 13, 17, 21, ...	Blue: $a_n = 6n - 4$ Light Brown: $a_n = 4n - 5$	Red: $a_n = 6n + 2$ Purple: $a_n = 4n + 5$
5) -5, -2, 1, 4, ...	Orange: $a_n = 5n + 2$ Light Blue: $a_n = 3n - 8$	Dark blue: $a_n = 3n - 5$ Yellow: $a_n = 3n + 2$
6) 19, 31, 43, 55, ...	Green: $a_n = 8n + 12$ Blue: $a_n = 12n - 6$	Light Pink: $a_n = 12n + 7$ Yellow: $a_n = 8n + 7$
7) -2, -5, -8, -11, ...	Light brown: $a_n = 3n + 1$ Brown: $a_n = 2n - 3$	Yellow: $a_n = -3n - 2$ Green: $a_n = -3n + 1$
8) 19, 23, 27, 31, ...	Blue: $a_n = 4n - 10$ Orange: $a_n = 4n + 15$	Red: $a_n = 2n - 1$ Pink: $a_n = -2n + 1$

Find the next three terms of each arithmetic sequence.

9) 82, 76, 70, 64, ...	Brown: 58, 52, 46 Red: 70, 76, 82	Pink: 50, 36, 22 Blue: 63, 62, 61
10) -49, -35, -21, -7, ...	Pink: 0, 14, 28 Brown: -3, 14, 21	Orange: 0, 7, 14 Blue: 7, 21, 35
11) $\frac{3}{4}, \frac{1}{2}, \frac{1}{4}, 0, \dots$	Red: $\frac{-1}{2}, \frac{-1}{4}, \frac{-1}{6}$ Purple: $\frac{-1}{8}, \frac{-1}{4}, \frac{-1}{2}$	Yellow: $\frac{-1}{4}, \frac{-1}{2}, \frac{-3}{4}$ Blue: $\frac{-1}{4}, \frac{-1}{8}, \frac{-3}{12}$
12) -10, -3, 4, 11, ...	Blue: 24, 37, 50 Light Blue: 14, 17, 20	Dark Blue: 18, 25, 32 Orange: 4, -3, -10

