

## Quiz 10

1. (a)  $a \cdot 7^n$
- (b)  $(a+bn+cn^2) \cdot 7^n$
- (c)  $a+bn$
- (d)  $an(-2)^n$
- (e)  $n(a+bn) \cdot 3^n$

2.  $b_n = a+bn \Rightarrow$

$$a+bn = a + b(n-1) + 6(a+b(n-2)) + 12n$$

$n: b = b + 6b + 12$

$1: a = a - b + 6a - 12b$

$\rightarrow -6b = 12 \Rightarrow b = -2$

$\rightarrow -6a = -b - 12b = -13b = 1$

$$a = \frac{13}{6}b = \frac{13(-2)}{6} = -\frac{13}{3}$$

$$b_n^p = -\frac{13}{3} - 2n.$$