

Video 286/287

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|-----------------------------|----------------------------|----------------------------|--------------|
| 1a) Add 2 each time         | 11, 13, 15                 | b) Add 5 each time         | 25, 30, 35   |
| c) Add 3 each time          | 13, 16, 19                 | d) Subtract 1 each time    | 16, 15, 14   |
| e) Multiply by 2 each time  | 80, 160, 320               | f) Add 4 each time         | 26, 30, 34   |
| g) Add 5 each time          | 21, 26, 31                 | h) Multiply by 2 each time | 32, 64, 128  |
| i) Subtract 20 each time    | 20, 0, -20                 | j) Add 7 each time         | 33, 40, 47   |
| k) Multiply by 10 each time | 10 000, 100 000, 1 000 000 |                            |              |
| l) Divide by 2 each time    | 4, 2, 1                    | m) Add 1 each time         | 99, 110, 121 |
| n) Add 9 each time          | 68, 77, 86                 | o) Subtract 6 each time    | -9, -15, -21 |
| p) Add 0.5 each time        | 4, 4.5, 5                  | q) Add 14 each time        | 64, 78, 92   |
| r) Multiply by 3 each time  | 81, 243, 729               |                            |              |

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|---------------------------------------|-----|-------------------------------|----|
| 2a) Add the previous two terms,       | 13  | b) Add on 2 more each time,   | 26 |
| c) Add on 10 more each time           | 105 | d) Subtract 1 more each time, | 90 |
| e) Add on 2 more each time,           | 19  |                               |    |
| f) Add on double the previous amount, | 20  |                               |    |

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|---------------|-----------|-------|-------|-------|-------|
| 3a) 6         | b) 8      | c) 13 | d) 31 | e) 33 | f) 29 |
| g) 29         | h) 7, 13  |       |       |       |       |
| i) 11, 19     | j) 25, 32 |       |       |       |       |
| k) 15, 24, 33 |           |       |       |       |       |

Apply:

- 1a) 33
- b) Add 6 each time
- c) The sequence is made up of odd numbers, but 122 is even

- 2a) 17
- b) 32
- c) 305
- d) 299

3) 20

4a) 78

b) All of the terms in the sequence are even and 883 is odd

5a) 7

b) 23

6a) 6

b) 66

7)  $a=4$      $b = 2$

8) 19, 49, 79

9) 11.5

10)  $17a - 4b, 21a - 5b$

11a) S                    (one, two, three, four, five, .....)

b) S                    (days of the week)

c) I                    (colours in the light spectrum)

d) 111221            (the "look and say" sequence)