

Name: \_\_\_\_\_



Find the next three terms in the number sequences:

a) 6, 8, 10, 12, 14...

**16, 18, 20**

f) 4, 7, 13, 22, 34...

**49, 67, 88**

b) 15, 19, 23, 27, 31...

**35, 39, 43**

g) 15, 12, 9, 6, 3...

**0, -3, -6**

c) 38, 33, 28, 23, 18...

**13, 8, 3**

h) 27, 22, 17, 12, 7...

**2, -3, -8**

d) 2, 3, 5, 8, 12...

**17, 23, 30**

i) 2, 4, 8, 16, 32...

**64, 128, 256**

e) 60, 55, 50, 45, 40...

**35, 30, 25**

j) 1, 1, 2, 3, 5, 8, 13...

**21, 34, 45**

Write down the rule for each number sequence:

k) 14, 18, 22, 26, 30...

**Add 4**

o) 45, 35, 26, 34, 27...

**Subtract 10, 11, 12...**

l) 67, 61, 55, 49, 43...

**Subtract 6**

p) 1, 4, 9, 16, 25...

**Square numbers**

m) 36, 45, 54, 63, 72...

**Add 9**

q) -7, -14, -21, -28, -35...

**Subtract 7**

n) 5, 10, 20, 40, 80...

**Times by 2**

r) 8, 6, 2, 4, -2, 6, -8...

**Subtract previous 2 terms**

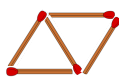
For each sequence of diagrams, draw the next pattern


**Exam question:**

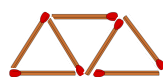
Matches are laid out in the patterns below. If the pattern continues, how many matches will there be in the 4<sup>th</sup> and 5<sup>th</sup> diagrams?



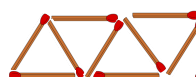
1<sup>st</sup>



2<sup>nd</sup>



3<sup>rd</sup>



4<sup>th</sup>

**9**



5<sup>th</sup>

**11**

