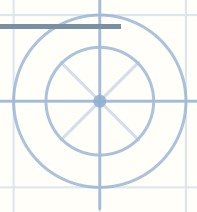


## Sums of series — Arithmetic series

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

Date: \_\_\_\_\_



$S_n$  is the sum of the first  $n$  terms. Each sequence steps by the same amount.

1  $5, 1, -3, \dots S_7 =$  \_\_\_\_\_

2  $7, 12, 17, \dots S_5 =$  \_\_\_\_\_

3  $1, -1, -3, \dots S_5 =$  \_\_\_\_\_

4  $5, 3, 1, \dots S_6 =$  \_\_\_\_\_

5  $7, 4, 1, \dots S_6 =$  \_\_\_\_\_

6  $6, 12, 18, \dots S_7 =$  \_\_\_\_\_

7  $6, 11, 16, \dots S_7 =$  \_\_\_\_\_

8  $4, 2, 0, \dots S_5 =$  \_\_\_\_\_

9  $4, 10, 16, \dots S_5 =$  \_\_\_\_\_

10  $7, 3, -1, \dots S_6 =$  \_\_\_\_\_



## Sums of series · Arithmetic series — Answer key

1.  $S_7$  for 5, 1, -3, ... = -49

2.  $S_5$  for 7, 12, 17, ... = 85

3.  $S_5$  for 1, -1, -3, ... = -15

4.  $S_6$  for 5, 3, 1, ... = 0

5.  $S_6$  for 7, 4, 1, ... = -3

6.  $S_7$  for 6, 12, 18, ... = 168

7.  $S_7$  for 6, 11, 16, ... = 147

8.  $S_5$  for 4, 2, 0, ... = 0

9.  $S_5$  for 4, 10, 16, ... = 80

10.  $S_6$  for 7, 3, -1, ... = -18

