

# DRAWING A STRAIGHT LINE GRAPH FROM A TABLE OF VALUES – ANSWERS

## SPIRAL



- 
- |                                      |   |                               |   |
|--------------------------------------|---|-------------------------------|---|
| <b>S1.</b> What is one half of 10?   | 5 | <b>S2.</b> What is 10% of 50? | 5 |
| <b>S3.</b> What is one quarter of 8? | 2 | <b>S4.</b> What is 25% of 20? | 5 |

## DEVELOP

- 
- |                                                                            |                                                                      |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>1.</b> For y<br>= x +<br>1,<br>find<br>y<br>when<br>x=0,<br>x=1,<br>x=2 | <b>2.</b> For y<br>= 2x,<br>find<br>y<br>when<br>x=0,<br>x=1,<br>x=2 |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|
- $x=0: y=1; x=1: y=2; x=2: y=3$
- $x=0: y=0; x=1: y=2; x=2: y=4$

3. For y  $x=0: y=1; x=1:$   
=  $3x$   $y=4; x=2: y=7$   
+ 1,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

4. For y  $x=0: y=0; x=1:$   
=  $4x,$   $y=4; x=2: y=8$   
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

5. For y  $x=0: y=3; x=1:$   
=  $2x$   $y=5; x=2: y=7$   
+ 3,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

6. For y  $x=0: y=2; x=1:$   
=  $x +$   $y=3; x=2: y=4$   
2,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

7. For y  $x=0: y=0; x=1:$   
=  $5x,$   $y=5; x=2: y=10$   
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

8. For y  $x=0: y=2; x=1:$   
=  $3x$   $y=5; x=2: y=8$   
+ 2,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

9. For y  $x=0: y=1; x=1:$   
=  $4x$   $y=5; x=2: y=9$   
+ 1,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

10. For y  $x=1: y=1; x=2:$   
=  $2x$   $y=3; x=3: y=5$   
- 1,  
find  
y  
when  
 $x=1,$   
 $x=2,$   
 $x=3$

11. For y  $x=0: y=0; x=1:$   
=  $6x,$   $y=6; x=2: y=12$   
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

12. For y  $x=0: y=5; x=1:$   
=  $x +$   $y=6; x=2: y=7$   
5,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

13. For y  $x=0: y=0; x=1:$   
=  $3x,$   $y=3; x=2: y=6$   
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

14. For y  $x=0: y=4; x=1:$   
=  $2x$   $y=6; x=2: y=8$   
+ 4,  
find  
y  
when  
 $x=0,$   
 $x=1,$   
 $x=2$

15. For y  
 $= 5x$   
 $+ 2$ ,  
 find  
 y  
 when  
 $x=0$ ,  
 $x=1$ ,  
 $x=2$

$x=0: y=2; x=1:$   
 $y=7; x=2: y=12$

16. For y  
 $= 4x$ ,  
 find  
 y  
 when  
 $x=0$ ,  
 $x=1$ ,  
 $x=3$

$x=0: y=0; x=1:$   
 $y=4; x=3: y=12$

17. For y  
 $= 3x$   
 $+ 3$ ,  
 find  
 y  
 when  
 $x=0$ ,  
 $x=2$ ,  
 $x=4$

$x=0: y=3; x=2:$   
 $y=9; x=4: y=15$

18. For y  
 $= x +$   
 $10$ ,  
 find  
 y  
 when  
 $x=0$ ,  
 $x=1$ ,  
 $x=2$

$x=0: y=10; x=1:$   
 $y=11; x=2:$   
 $y=12$

19. For y  
 $= 2x$   
 $+ 1$ ,  
 find  
 y  
 when  
 $x=0$ ,  
 $x=3$ ,  
 $x=5$

$x=0: y=1; x=3:$   
 $y=7; x=5: y=11$

20. For y  
 $=$   
 $10x$ ,  
 find  
 y  
 when  
 $x=0$ ,  
 $x=1$ ,  
 $x=2$

$x=0: y=0; x=1:$   
 $y=10; x=2:$   
 $y=20$

## APPLY



**A1.** A taxi charges £3 fixed fee plus £2 per mile. The cost (y pounds) for x miles is  $y = 2x + 3$ . What is the cost for 0 miles, 1 mile, 2 miles? 0 miles: £3; 1 mile: £5; 2 miles: £7

**A2.** A bus travels 30 miles per hour. The distance (y miles) after x hours is  $y = 30x$ . How far has it travelled after 0 hours, 1 hour, 2 hours? 0 hours: 0 miles; 1 hour: 30 miles; 2 hours: 60 miles

- A3.** A plant grows 3 cm per week. The height (y cm) after x weeks starting from 4 cm is  $y = 3x + 4$ . What is the height after 0 weeks, 1 week, 2 weeks?
- 0 weeks: 4 cm; 1 week: 7 cm; 2 weeks: 10 cm

**A4.** A pool fills at 50 litres per minute. The water amount (y litres) after x minutes is  $y = 50x$ . How much water is there after 0 minutes, 2 minutes, 4 minutes?

0 minutes: 0 litres; 2 minutes: 100 litres; 4 minutes: 200 litres

**A5.** A phone call costs 15 pence per minute plus a 20 pence connection fee. The total cost (y pence) for x minutes is  $y = 15x +$