Sample formating using `multienumerate`

Sometimes we want to typeset the solutions to exercises. This is easy to do using the `multienumerate` environment.

Answers to All Exercises

1. Not
2. Linear
3. Not
4. Quadratic
5. Not
6. Linear
7. No; if $x = 3$, then $y = -2$.
8. $(x_1, x_2) = (2\frac{1}{3}t, t)$ or $(s, 3s - 6)$
9. $(x_1, x_2, x_3) = (2\frac{5}{2}s - 3t, s, t)$
10. $(x_1, x_2, x_3, x_4) = (\frac{1}{4}\frac{5}{4}s\frac{3}{4}t - u, s, t, u)$ or $(s, t, u, \frac{1}{4} - s\frac{5}{4}t\frac{3}{4}u)$
11. $(2, -1, 3)$
12. None
13. $(2, 1, 0, 1)$
14. $(0, 0, 0, 0)$

We can also enumerate the items using an even-only or odd only counter.

Answers to Even-Numbered Exercises

2. Not
4. Linear
6. Not
8. Quadratic
10. Not
12. Linear
14. No; if $x = 3$, then $y = -2$.
16. $(x_1, x_2) = (2\frac{1}{3}t, t)$ or $(s, 3s - 6)$
18. $(x_1, x_2, x_3) = (2\frac{5}{2}s - 3t, s, t)$
20. $(x_1, x_2, x_3, x_4) = (\frac{1}{4}\frac{5}{4}s\frac{3}{4}t - u, s, t, u)$ or $(s, t, u, \frac{1}{4} - s\frac{5}{4}t\frac{3}{4}u)$
22. $(2, -1, 3)$
24. None
26. $(2, 1, 0, 1)$
28. $(0, 0, 0, 0)$

Answers to Odd-Numbered Exercises

1. Not
3. Linear
5. Not
7. Quadratic
9. Not
11. Linear
13. No; if $x = 3$, then $y = -2$.
15. $(x_1, x_2) = (2\frac{1}{3}t, t)$ or $(s, 3s - 6)$
17. $(x_1, x_2, x_3) = (2\frac{5}{2}s - 3t, s, t)$
19. $(x_1, x_2, x_3, x_4) = (\frac{1}{4}\frac{5}{4}s\frac{3}{4}t - u, s, t, u)$ or $(s, t, u, \frac{1}{4} - s\frac{5}{4}t\frac{3}{4}u)$
21. $(2, -1, 3)$
23. None
25. $(2, 1, 0, 1)$
27. $(0, 0, 0, 0)$

Sometimes we want to create sublists which are enumerated using an alpha counter.

1. Which of the following numbers is the solution of the equation $x3 = 7$:
   (a) 1 (b) 2 (c) 3 (d) 4
2. The value of $\log_2 8$ is:
   (a) 1 (b) -1 (c) 3 (d) -3

Answers to All Exercises

1. Not
2. Linear
3. Not
4. Quadratic
5. Not
6. Linear
7. $(x_1, x_2) = (2\frac{1}{3}t, t)$ or $(s, 3s - 6)$
8. $(x_1, x_2, x_3) = (2\frac{5}{2}s - 3t, s, t)$
9. $(x_1, x_2, x_3, x_4) = (\frac{1}{4}\frac{5}{4}s\frac{3}{4}t - u, s, t, u)$ or $(s, t, u, \frac{1}{4} - s\frac{5}{4}t\frac{3}{4}u)$
10. $(2, -1, 3)$
11. None
12. $(2, 1, 0, 1)$
13. $(0, 0, 0, 0)$
14. Not
15. Linear
16. Not
17. Quadratic
18. Not
19. Linear
20. $(x_1, x_2) = (2\frac{1}{3}t, t)$ or $(s, 3s - 6)$
21. $(x_1, x_2, x_3) = (2\frac{5}{2}s - 3t, s, t)$
22. $(x_1, x_2, x_3, x_4) = (\frac{1}{4}\frac{5}{4}s\frac{3}{4}t - u, s, t, u)$ or $(s, t, u, \frac{1}{4} - s\frac{5}{4}t\frac{3}{4}u)$
23. $(2, -1, 3)$
24. None
25. $(2, 1, 0, 1)$
26. $(0, 0, 0, 0)$
27. Not
28. Linear
29. Not
30. Quadratic
31. Not
32. Linear
33. $(x_1, x_2) = (2\frac{1}{3}t, t)$ or $(s, 3s - 6)$
34. $(x_1, x_2, x_3) = (2\frac{5}{2}s - 3t, s, t)$
35. $(x_1, x_2, x_3, x_4) = (\frac{1}{4}\frac{5}{4}s\frac{3}{4}t - u, s, t, u)$ or $(s, t, u, \frac{1}{4} - s\frac{5}{4}t\frac{3}{4}u)$
36. $(2, -1, 3)$
37. None
38. $(2, 1, 0, 1)$
39. $(0, 0, 0, 0)$

Multiple Choice

1. Which of the following numbers is the solution of the equation $x3 = 7$:

   (a) 1 (b) 2 (c) 3 (d) 4

2. The value of $\log_2 8$ is:

   (a) 1 (b) -1 (c) 3 (d) -3

3. Which of the following numbers is the solution of the equation $x3 = 7$:

   (a) 1 (b) 2 (c) 3 (d) 4

4. The value of $\log_2 8$ is:

   (a) 1 (b) -1 (c) 3 (d) -3

5. Which of the following numbers is the solution of the equation $x3 = 7$:

   (a) 1 (b) 2 (c) 3 (d) 4

6. The value of $\log_2 8$ is:

   (a) 1 (b) -1 (c) 3 (d) -3