



What makes an algorithm?

PRACTICE WORKSHEET

12 exercises | A4 | 1 / 2

Name: _____ Date: _____

Show your working in the blank space or on separate paper. Sketch labelled rods/beads when asked to represent a number.

1 Start with 12. Multiply by 5, then add 1.

2 Start with 9. Multiply by 2, then add 9.

3 Start with 6. Multiply by 3, then add 8.

4 Start with 3. Multiply by 4, then add 7.

5 Start with 11. Multiply by 5, then add 2.

6 Start with 8. Multiply by 2, then add 1.

7 Start with 5. Multiply by 3, then add 9.

8 Start with 2. Multiply by 4, then add 8.

9 Start with 6. Multiply by 5, then add 7.

10 Start with 3. Multiply by 2, then add 6.

11 Start with 11. Multiply by 3, then add 5.

12 Start with 8. Multiply by 4, then add 4.

Practise interactively and explore the method:

<https://goofergames.com/math/world/algorithms>



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ANSWER KEY

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Use after completing the practice page. Values are generated by the page's shared engine.

Equivalent exact representations are valid where the prompt allows them. Non-integer results are rounded to two decimals.

1 Answer: 61

State after multiplying by 5: 60; Output after adding: 61

2 Answer: 27

State after multiplying by 2: 18; Output after adding: 27

3 Answer: 26

State after multiplying by 3: 18; Output after adding: 26

4 Answer: 19

State after multiplying by 4: 12; Output after adding: 19

5 Answer: 57

State after multiplying by 5: 55; Output after adding: 57

6 Answer: 17

State after multiplying by 2: 16; Output after adding: 17

7 Answer: 24

State after multiplying by 3: 15; Output after adding: 24

8 Answer: 16

State after multiplying by 4: 8; Output after adding: 16

9 Answer: 37

State after multiplying by 5: 30; Output after adding: 37

10 Answer: 12

State after multiplying by 2: 6; Output after adding: 12

11 Answer: 38

State after multiplying by 3: 33; Output after adding: 38

12 Answer: 36

State after multiplying by 4: 32; Output after adding: 36

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