

Unit 04_005 — Methods

1. Why do method names often include verbs?
2. What are 4 advantages of using methods?
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3. Is it better to have large, powerful and complex methods, or is it better to have methods that do one thing?

Unit 04_010

4. What does "public" mean in the declaration of the method?
5. What does the `void` stand for?
6. Can a method call another method?
7. Can a method call itself? Is that a good idea?

Unit 04_020 Method returning value

8. What extra statement do methods that return a value have that void methods do not need to have?

9. Write a method that returns the day of the current month. You will need to look at the `LocalDate` API methods to find the method that returns the date. Use the model program in the video to find the date. Return the day of the month rather than the year. Be sure to update the local variable so the name is appropriate for a day. You might want to try coding this in IntelliJ.

Unit 04_023 Scope and Local Variables

10. What does "Scope" mean?
11. A "Local Variable" is one that is declared inside
 - a class
 - a method

Unit 04_025 Parameters and Argument

12. What is the difference between an argument and a parameter?
13. If there are more than two arguments, does the order of the arguments matter?
14. Do arguments and parameters need to have the same name?

Unit 04_027 Method Signature

15. Circle the items that are part of the method signature

- return type
- method name
- data types of parameters
- variable names of parameters

16. Can a class have two different methods with the same name? Explain your answer.

17. Can a class have two different methods with the same signature? This was not explained in the video, so you will need to think about it. Why can't two different methods have the same signature if they are in the same class?

Unit 04_030 JavaDoc Comments

18. How is the syntax of a JavaDoc Comment different than the syntax of a Block comment?

19. Write the entire JavaDoc comment for the following method (only the first line of the method is shown. Be sure to write the javadoc comment above the first line) The method calculates the hypotenuse of a right triangle given the two sides.

```
public static void double calculateHypoteneuse(double a, double b)
```

20. Do you have any other questions?