

PRINT NAME

PERM NUMBER

No calculators

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box

provided.

TA: ☐ Trevor  
☐ NickTime: ☐ 4:30 ☐ 6:30  
☐ 5:30 ☐ 7:30

1. What is the keyword?

**Today we will be working in groups of 3.** Discuss the following questions about exact equations with your group, and write down the answers your group comes up with. You can each write the same things, but **everyone in the group must turn in their own quiz.**

2. Why do you think exact differential equations are called “exact”? [There is a “right” answer here.] **Use complete sentences.**

3. When you are deciding how to solve a given DE, what would give you the suspicion that it might be exact? [Is there a form they usually come in?] **Use complete sentences.**

4. If you suspect that a differential equation is probably exact, how can you know for sure? **Use complete sentences.**

5. How do you solve an exact differential equation? **Use complete sentences.**

6. Make up your own exact differential equation and solve it below. [Your answer here should be different from the other members of your group]

Your equation:

Solve your equation in the space below.

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7. Each member in turn, explain your solution to the rest of the group. While you are listening, write each differential equation and its solution below. [You don't need to copy all the work to solve, just listen to your groupmates' explanations.]

- Group member's name:

Equation:

Solution:

This groupmate presented how to solve their equation: ☐

This groupmate did **not** present: ☐

- Group member's name:

Equation:

Solution:

This groupmate presented how to solve their equation: ☐

This groupmate did **not** present: ☐