

1. Through which of the following is the general solution of the given differential equation obtained?



- a. Characteristic equation of the case
- b. Characteristic equation of the case
- c. Characteristic equation of the case
- d. Characteristic equation

2. A particular integral of the given differential equation is

- a.  $\frac{1}{2} \sin 2x - \frac{1}{4} \cos 2x$
- b.  $\frac{1}{2} \cos 2x - \frac{1}{4} \sin 2x$
- c.  $\frac{1}{2} \sin 2x + \frac{1}{4} \cos 2x$
- d.  $\frac{1}{2} \cos 2x + \frac{1}{4} \sin 2x$

3. Which of the following is the correct form of the particular integral of the given differential equation?

4. Which of the following is the correct form of the particular integral of the given differential equation?

5. Which of the following is the correct form of the particular integral of the given differential equation?

- a.  $\frac{1}{2} \sin 2x - \frac{1}{4} \cos 2x$
- b.  $\frac{1}{2} \cos 2x - \frac{1}{4} \sin 2x$