

1. What is the Laplace transform of the function $f(t) = t$?

- A. $F(s) = 1/s$
- B. $F(s) = 1/s^2$
- C. $F(s) = s$
- D. $F(s) = s^2$

2. What is the inverse Laplace transform of the function $F(s) = 1/s$?

- A. $f(t) = t$
- B. $f(t) = 1$
- C. $f(t) = e^{-t}$
- D. $f(t) = \sin(t)$

3. What is the Laplace transform of the function $f(t) = e^{-t}$?

- A. $F(s) = 1/s$
- B. $F(s) = 1/s^2$
- C. $F(s) = s$
- D. $F(s) = s^2$

4. What is the inverse Laplace transform of the function $F(s) = s$?

- A. $f(t) = t$
- B. $f(t) = 1$
- C. $f(t) = e^{-t}$
- D. $f(t) = \sin(t)$

5. What is the Laplace transform of the function $f(t) = \sin(t)$?

- A. $F(s) = 1/s$
- B. $F(s) = 1/s^2$
- C. $F(s) = s$
- D. $F(s) = s^2$

6. What is the inverse Laplace transform of the function $F(s) = s^2$?

- A. $f(t) = t$
- B. $f(t) = 1$
- C. $f(t) = e^{-t}$

D. $f(t) = \sin(t)$

7. What is the Laplace transform of the function $f(t) = t^2$?

A. $F(s) = 1/s$

B. $F(s) = 1/s^2$

C. $F(s) = s$

D. $F(s) = s^2$

8. What is the inverse Laplace transform of the function $F(s) = 1/s^2$?

A. $f(t) = t$

B. $f(t) = 1$

C. $f(t) = e^{-t}$

D. $f(t) = \sin(t)$

9. What is the Laplace transform of the function $f(t) = \cos(t)$?

A. $F(s) = 1/s$

B. $F(s) = 1/s^2$

C. $F(s) = s$

D. $F(s) = s^2$

10. What is the inverse Laplace transform of the function $F(s) = 1/s^2$?

A. $f(t) = t$

B. $f(t) = 1$

C. $f(t) = e^{-t}$

D. $f(t) = \sin(t)$

Answer Key:

1. C

2. C

3. A

4. A

5. C

6. B

7. D

8. D

9. B

10. D