SASKATCHEWAN PHYSICS 30 · UNIT D · 25 QUESTIONS

Fields - Gravitational, Electric and Magnetic — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A region where a mass feels a gravitational force is called**

- A gravitational field
- B magnetic field
- C field line
- D Coulomb law

Understand It with Pulse | Flag a mistake

2 **Field lines for a positive charge point**

- A toward the charge
- B away from the charge
- C in circles only
- D downward only

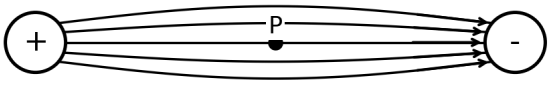
Understand It with Pulse | Flag a mistake

3 **A voltage of 12 V is applied across a resistance of 4 ohms. The current, in amperes, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The diagram shows field lines between a positive and a negative charge. The lines go from**



- **A** negative to positive
- **B** in a circle
- **C** positive to negative
- **D** downward only

Understand It with Pulse | Flag a mistake

5 **A region where a charge feels an electric force is called**

- **A** field line
- **B** Coulomb law
- **C** electric potential
- **D** electric field

Understand It with Pulse | Flag a mistake

6 **Doubling the distance between two charges makes the electric force**

- **A** one quarter as large
- **B** twice as large
- **C** four times as large
- **D** unchanged

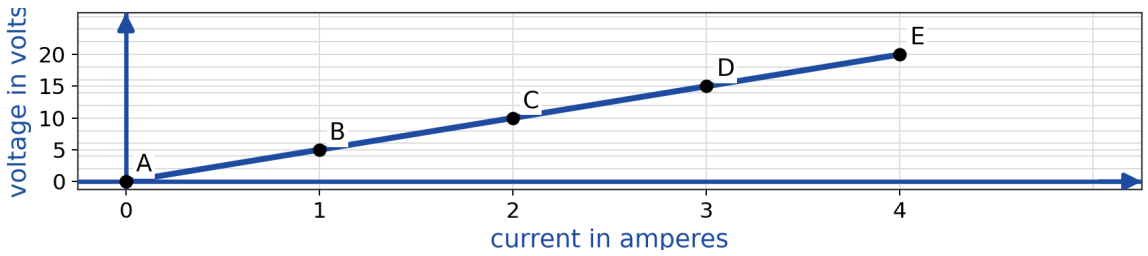
Understand It with Pulse | Flag a mistake

7 **A current of 2 A flows through a resistance of 8 ohms. The voltage, in volts, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The graph shows voltage against current. The voltage at 3 amperes, in volts, is ____**



ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A region where a magnet or moving charge feels a force is called**

A Coulomb law

B magnetic field

C electric potential

D current

Understand It with Pulse | Flag a mistake

10 **A magnetic field around a straight wire forms**

A straight lines only

B no pattern

C circles around the wire

D lines away from the wire

Understand It with Pulse | Flag a mistake

11 **A device uses 12 V and 3 A. Its power, in watts, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **A student draws arrows around a magnet to show which way a compass needle would point. The lines she draws are called**

A electric potential lines

B current lines

C resistance lines

D field lines

Understand It with Pulse | Flag a mistake

13 **Increasing current in a coil makes its magnetic field**

- A stronger
- B weaker
- C unchanged
- D reverse only

Understand It with Pulse | Flag a mistake

14 **A voltage of 24 V is applied across a resistance of 6 ohms. The current, in amperes, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The law for force between charges is called**

A current

B Coulomb law

C resistance

D electromagnet

Understand It with Pulse | Flag a mistake

16 **Electric field strength is measured in**

A volts only

B amperes

C newtons per coulomb

D ohms

Understand It with Pulse | Flag a mistake

17 **A current of 3 A flows through a resistance of 10 ohms. The voltage, in volts, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A charge of 2 C has 10 J of electric potential energy at a point. The electric potential at that point is**

A 20 V

B 5 V

C 12 V

D 0.2 V

Understand It with Pulse | Flag a mistake

19

Like charges

A repel each other

B attract each other

C have no force

D always cancel

Understand It with Pulse | Flag a mistake

20

A device uses 6 V and 4 A. Its power, in watts, is ____

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **Flow of charge per unit time is called**

A electromagnet

B current

C right hand rule

D gravitational field

Understand It with Pulse | Flag a mistake

22 **A voltage of 18 V is applied across a resistance of 3 ohms. The current, in amperes, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **Opposition to current flow is called**

A right hand rule

B gravitational field

C resistance

D electric field

Understand It with Pulse | Flag a mistake

24 **A current of 4 A flows through a resistance of 7 ohms. The voltage, in volts, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

25

A magnet made by current in a coil is called

A gravitational field

B electric field

C magnetic field

D electromagnet

Understand It with Pulse

Flag a mistake

ANSWER KEY

1. A
2. B
3. 3
4. C
5. D
6. A
7. 16
8. 15
9. B
10. C
11. 36
12. D
13. A
14. 4
15. B
16. C
17. 30
18. B
19. A
20. 24
21. B
22. 6
23. C
24. 28
25. D

© 2026 Brett Robbins. All Rights Reserved.