

PHY III

1. 1.328×10^{24}

Part A

How many atoms of hydrogen are in 150 g of hydrogen peroxide (H_2O_2)?

Express your answer as a number of atoms.

templates Symbols undo redo reset keyboard shortcuts help
exponent subscript fraction square root nth root vector unit vector absolute value scientific notation
delete Close keyboard

$N = 1.328 \cdot 10^{24}$ atoms

Submit

[Previous Answers](#)

[Request Answer](#)

✖ Incorrect; Try Again; 4 attempts remaining

[Provide Feedback](#)

2. -700 J

3. 7.7922 Degrees Celsius

4. 1.2680

5. 602.4024 g

6. 10 J

7. 0.7964 N

8. 53.7 psi

9. 450 J

10. 2.869×10^8

11. 6.173×10^5 J

12. 17.5823°C

13. 78.6349 s

A pump is used to empty a 4800 L wading pool. The water exits the 3.0-cm-diameter hose at a speed of 1.8 m/s.

Part A

How long will it take to empty the pool?

Express your answer in seconds.

templates Symbols undo redo reset keyboard shortcuts help
 $t = 78.6349$ s

Submit

[Previous Answers](#)

[Request Answer](#)

✖ Incorrect; Try Again

14. 866.3265 m

15. 9 g of mercury

16. 1.6915

17. **Part A:** $V = 0.051 \text{ m}^3$

Part B: The patient's density would be measured lower than what it is

Part C: 1.18

Part D: 45 N

Part E: 0.1

1. 1064.8148 kg/m³.

2.D

3. $1.5 \times 10^4 \text{ Pa}$

4. C.