

PRACTICE SHEET ON KINEMATIC EQUATION

Name:

Date:

Time:

Complete the kinematic equations below by dragging the variables into the correct spot.

V_f^2	V_i^2	$2a$	at	Δx	$-V_i$	$2a\Delta x$	V_f	V_i
V_f^2	Δx	a	V_i	t	V_x	$2\Delta y$	V_f	$\frac{1}{2}a$

1. final Velocity

$$V_f^2 = \boxed{} + 2 a \boxed{}$$

2. horizontal distance

$$\Delta x = \boxed{} t + \boxed{} t^2$$

3. acceleration

$$a = \frac{\boxed{}}{t}$$

4. horizontal distance

$$\Delta x = \boxed{} \boxed{}$$

5. initial Velocity

$$V_i = \boxed{} - \boxed{}$$

6. acceleration

$$a = \frac{\boxed{} - V_i^2}{2 \boxed{}}$$

7. time

$$t = \sqrt{\frac{\boxed{}}{a}}$$

8. time

$$t = \frac{v_f - \boxed{}}{\boxed{}}$$

9. horizontal distance

$$\Delta x = \frac{\boxed{} - V_i^2}{\boxed{}}$$

10. Initial velocity

$$V_i^2 = V_f^2 - \boxed{}$$

Part 2. Match the formulas with the correct variable.

11. time = $V_f - at$

12. Final Velocity = $\frac{1}{2} at^2$

13. maximum distance = $\frac{V_f - Vi}{t}$

14. range = $Vi^2 + 2a\Delta y$

15. acceleration = $\sqrt{\frac{2\Delta y}{g}}$

16. initial velocity = $V_x t$