

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

$$V_f^2 = \square + 2 a \square$$

2. horizontal distance

$$\Delta x = \square t + \square t^2$$

3. acceleration

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

4. horizontal distance

$$\Delta x = \square \square$$

5. initial Velocity

$$V_i = \square - \square$$

6. acceleration

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

7. time

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

8. time

$$t = \frac{V_f - \square}{\square}$$

9. horizontal distance

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

10. Initial velocity

$$V_i^2 = V_f^2 - \square$$

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 $= \frac{V_f - V_i}{t}$

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

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

16. initial velocity $= V_x t$