

Mathematics Toolkit: Manipulating Equations

Solve for each equation for the variable indicated. Use another sheet of paper if you don't have room on this sheet.

1. $PV = nRT$ solve for n

2. $\frac{V_1}{T_1} = \frac{V_2}{T_2}$ solve for T_1

3. $F = \frac{9}{5}C + 32$ solve for C

4. $d = v_0 t + \frac{1}{2}at^2$ solve for a

1. $PV = nRT$ solve for n

answer:

$$n = \frac{PV}{RT}$$

2. $\frac{V_1}{T_1} = \frac{V_2}{T_2}$ solve for T_1

answer:

$$\frac{V_1 T_2}{V_2} = T_1$$

3. $F = \frac{9}{5}C + 32$ solve for C

answer:

$$c = \frac{5}{9}(F - 32)$$

4. $d = v_0 t + \frac{1}{2}at^2$ solve for a

answer:

$$a = \frac{2(d - v_0 t)}{t^2}$$