65. **a)** $O_P = G + M$ (1) $G = ?$ (2) $M = ?$ **b)** $u = a + b + c$ (1) $a = ?$ (2) $c = ?$

66. **a)** $A = a \cdot b$ (1) $a = ?$ (2) $b = ?$ **b)** $V = G \cdot h$ (1) $G = ?$ (2) $h = ?$

67. **a)** $M = 2a \cdot h_a$ (1) $a = ?$ (2) $h_a = ?$ **b)** $A = \pi ab$ (1) $a = ?$ (2) $b = ?$

68. **a)** $W = U \cdot I \cdot t$ (1) $I = ?$ (2) $t = ?$ **b)** $V = a \cdot b \cdot c$ (1) $a = ?$ (2) $c = ?$

69. **a)** $A = \frac{ab}{2}$ (1) $a = ?$ (2) $b = ?$ **b)** $A = \frac{ef}{2}$ (1) $e = ?$ (2) $f = ?$

70. **a)** $V = \frac{Gh}{3}$ (1) $G = ?$ (2) $h = ?$ **b)** $A = \frac{\pi ab}{2}$ (1) $a = ?$ (2) $b = ?$

71. **a)** $b = \frac{\pi r \alpha}{180}$ (1) $\alpha = ?$ (2) $r = ?$ **b)** $V = \frac{abh}{3}$ (1) $a = ?$ (2) $h = ?$

72. **a)** $P = \frac{Bp}{100}$ (1) $p = ?$ (2) $B = ?$ **b)** $Z = \frac{Kpt}{36000}$ (1) $t = ?$ (2) $K = ?$

73. **a)** $v = \frac{s}{t}$ (1) $s = ?$ (2) $t = ?$ **b)** $\rho = \frac{A}{s}$ (1) $A = ?$ (2) $s = ?$

74. **a)** $Pp = Qq$ (1) $P = ?$ (2) $q = ?$ **b)** $ah_a = bh_b$ (1) $h_a = ?$ (2) $b = ?$

75. **a)** $U_2 = U_1 \cdot \frac{d_1}{d_2}$ (1) $U_1 = ?$ (2) $d_2 = ?$ **b)** $\frac{P}{Q} = \frac{h}{\ell}$ (1) $h = ?$ (2) $Q = ?$

76. **a)** $O_{Pr} = 2G + M$ (1) $G = ?$ (2) $M = ?$ **b)** $u = 2a + c$ (1) $c = ?$ (2) $a = ?$

77. **a)** $u = a + 2b + c$ (1) $a = ?$ (2) $b = ?$ **b)** $u = 2a + 2b$ (1) $a = ?$ (2) $b = ?$

78. **a)** $v = v_0 + at$ (1) $a = ?$ (2) $v_0 = ?$ **b)** $v = v_0 - gt$ (1) $v_0 = ?$ (2) $t = ?$

79. **a)** $m_1v_1 + m_2v_2 = 0$ (1) $v_2 = ?$ (2) $m_1 = ?$ **b)** $F\ell - Na = 0$ (1) $\ell = ?$ (2) $N = ?$

80. **a)** $y = kx + d$ (1) $d = ?$ (2) $k = ?$ **b)** $ax + by = c$ (1) $a = ?$ (2) $y = ?$

81. **a)** $z = ax + by + c$ (1) $b = ?$ (2) $x = ?$ **b)** $ax + by + cz = d$ (1) $a = ?$ (2) $z = ?$

82. **a)** $O_Q = 2ab + 2ac + 2bc$ (1) $a = ?$ (2) $b = ?$ **b)** $yR = F_1y_1 + F_2y_2$ (1) $y_1 = ?$ (2) $F_2 = ?$

83. **a)** $m = \frac{a+c}{2}$ (1) $a = ?$ (2) $c = ?$ **b)** $s = \frac{a+b+c}{2}$ (1) $a = ?$ (2) $b = ?$

84. **a)** $s = \frac{v_0 + v}{2} \cdot t$ (1) $v_0 = ?$ (2) $t = ?$ **b)** $A = \frac{a+c}{2} \cdot h$ (1) $a = ?$ (2) $h = ?$

85. **a)** $k = \frac{y_2 - y_1}{x_2 - x_1}$ (1) $x_1 = ?$ (2) $y_2 = ?$ **b)** $\frac{v_1 - v_0}{v_0} = -e$ (1) $v_0 = ?$ (2) $v_1 = ?$

86. **a)** $Q = -(P - B)\ell_1 + B\ell_2$ (1) $B = ?$ (2) $\ell_2 = ?$ **b)** $y - y_1 = k(x - x_1)$ (1) $k = ?$ (2) $x_1 = ?$

87. **a)** $Q = mc(T_2 - T_1)$ (1) $c = ?$ (2) $T_2 = ?$ **b)** $xR = F(x_2 + x_3)$ (1) $x_3 = ?$ (2) $F = ?$

88. **a)** $\ell = \ell_0(1 + \alpha t)$ (1) $\ell_0 = ?$ (2) $\alpha = ?$ **b)** $V = V_0(1 + \gamma t)$ (1) $V_0 = ?$ (2) $t = ?$

89. **a)** $s = \frac{v \cdot t_1}{2} + v(t - t_1)$ (1) $t = ?$ (2) $v = ?$ **b)** $k = \frac{f_1 \cdot r + f_2}{R}$ (1) $f_1 = ?$ (2) $f_2 = ?$

90. **a)** $f = \frac{w+u}{w+v} \cdot v_0$ (1) $v = ?$ (2) $w = ?$ **b)** $y - y_1 = \frac{y_2 - y_1}{x_2 - x_1}(x - x_1)$ (1) $x_1 = ?$ (2) $y_1 = ?$

91. **a)** $t_1 = \frac{v}{g} - \frac{t}{2}$ (1) $g = ?$ (2) $v = ?$ **b)** $\ell_2 = \frac{I_1}{I_1 + I_2}(\ell + \ell_1)$ (1) $\ell_1 = ?$ (2) $I_1 = ?$

92. **a)** $x = a + \frac{a_1 - a}{h} \cdot z$ (1) $a_1 = ?$ (2) $h = ?$ **b)** $x = a - \frac{a-b}{h} \cdot z$ (1) $a = ?$ (2) $z = ?$

93. **a)** $w = \frac{1}{R}(f + mr) + c$ (1) $f = ?$ (2) $r = ?$ **b)** $c_p = c_v + \frac{R}{M}$ (1) $R = ?$ (2) $M = ?$

94. **a)** $y = Af\left(t - \frac{r}{c}\right)$ (1) $c = ?$ (2) $t = ?$ **b)** $A \cdot \ell = \frac{A \cdot R}{K - 1}(T_1 - T_2)$ (1) $K = ?$ (2) $T_1 = ?$

95. **a)** $P = \frac{Qf_1 + (Q + G)f_2}{2r}$ (1) $G = ?$ (2) $Q = ?$ **b)** $P = Q \cdot \frac{r(1 + f_2) + f}{R - f_1 r}$ (1) $f_1 = ?$ (2) $r = ?$

96. **a)** $q = \frac{m-k}{m-1} \cdot c_v(T_2 - T_1)$ (1) $m = ?$ (2) $T_2 = ?$ **b)** $w = \frac{v}{a} \cdot \frac{6M_1}{3M_1 + M_2}$ (1) $M_1 = ?$ (2) $a = ?$

97. **a)** $c = \frac{M_1v_1 + M_2v_2 - (v_2 - v_1)KM_1}{M_1 + M_2}$ (1) $v_1 = ?$ (2) $M_2 = ?$ **b)** $x = \frac{D_1x_1 + D_2x_2}{D_1D_2}$ (1) $D_1 = ?$ (2) $x_2 = ?$

98. **a)** $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$ (1) $R_1 = ?$ (2) $R = ?$ **b)** $\frac{1}{f} = \frac{1}{g} + \frac{1}{b}$ (1) $b = ?$ (2) $f = ?$

99. **a)** $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$ (1) $R_2 = ?$ (2) $R_3 = ?$ **b)** $R = R_1 + \frac{R_2R_3}{R_2 + R_3}$ (1) $R_1 = ?$ (2) $R_2 = ?$

100. **a)** $\frac{3(m-2)}{Em} = \frac{1}{E_1}$ (1) $E = ?$ (2) $m = ?$ **b)** $Q = \frac{4h - r}{4h - 2r}$ (1) $h = ?$ (2) $r = ?$

101. **a)** $c = \frac{(M_1 - M_2)v_1 + 2M_2v_2}{M_1 + M_2}$ (1) $M_1 = ?$ (2) $v_2 = ?$ **b)** $c = \frac{(c_1m_1 + c_2m_2)}{m} \cdot \frac{(\vartheta - \vartheta_1)}{(\vartheta_2 - \vartheta)}$ (1) $\vartheta = ?$ (2) $\vartheta_2 = ?$

102. **a)** $T = \left(\frac{h}{v_1} + \frac{h}{v_2}\right) \cdot \frac{b}{s}$ (1) $h = ?$ (2) $v_2 = ?$ **b)** $M = \frac{P}{2}\left(\frac{1}{2} + \lambda\right) - P\lambda$ (1) $P = ?$ (2) $\lambda = ?$

103. **a)** $r = \frac{R_1R_2}{R_1 + R_2 + R_3}$ (1) $R_1 = ?$ (2) $R_3 = ?$ **b)** $I_1 = \frac{U + I_0R_2'}{R_1 + R_1' + R_2'}$ (1) $R_1 = ?$ (2) $R_2' = ?$

104. **a)** $y^2 = 2px$ (1) $p = ?$ (2) $y = ?$ **b)** $y = ax^2$ (1) $a = ?$ (2) $x = ?$

105. **a)** $V = a^2h$ (1) $a = ?$ (2) $h = ?$ **b)** $E = mc^2$ (1) $c = ?$ (2) $m = ?$

106. **a)** $s = \frac{g}{2}t^2$ (1) $g = ?$ (2) $t = ?$ **b)** $E = \frac{mv^2}{2}$ (1) $m = ?$ (2) $v = ?$

107. **a)** $V = \frac{a^2}{4} \cdot \sqrt{3}h$ (1) $a = ?$ (2) $h = ?$ **b)** $V = \frac{a^2\sqrt{3}h}{12}$ (1) $a = ?$ (2) $h = ?$

108. **a)** $s = v_0t - \frac{g}{2} \cdot t^2$ (1) $v_0 = ?$ (2) $g = ?$ **b)** $s = v_0t + \frac{a}{2} \cdot t^2$ (1) $a = ?$ (2) $v_0 = ?$

109. **a)** $V = \ell r\left(h - \frac{r}{2}\right)$ (1) $h = ?$ (2) $\ell = ?$ **b)** $x = \frac{a(a + 2c)}{2(a + b + c)}$ (1) $b = ?$ (2) $c = ?$

110. **a)** $E = \frac{Q}{r^2}$ (1) $r = ?$ (2) $Q = ?$ **b)** $F = \frac{Gm_1m_2}{r^2}$ (1) $m_1 = ?$ (2) $r = ?$

111. **a)** $I = I_0 + a^2A$ (1) $a = ?$ (2) $A = ?$ **b)** $y = ax^2 + c$ (1) $a = ?$ (2) $x = ?$

112. **a)** $a^2 + b^2 = c^2$ (1) $c = ?$ (2) $a = ?$ **b)** $s^2 = r^2 + h^2$ (1) $h = ?$ (2) $r = ?$

113. **a)** $a^2 + b^2 + c^2 = d^2$ (1) $d = ?$ (2) $b = ?$ **b)** $h_a^2 = h^2 + \left(\frac{a}{2}\right)^2$ (1) $h = ?$ (2) $a = ?$

114. **a)** $h_a^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $h_a = ?$ (2) $a = ?$ **b)** $h^2 + \left(\frac{a}{2}\sqrt{3}\right)^2 = h_a^2$ (1) $a = ?$ (2) $h = ?$

115. **a)** $E = G \cdot h + \frac{mv^2}{2}$ (1) $v = ?$ (2) $G = ?$ **b)** $b = rw^2\left(1 + \frac{r}{\ell}\right)$ (1) $\ell = ?$ (2) $w = ?$

116. **a)** $E = h(f_1 - f_2) + mc^2$ (1) $c = ?$ (2) $f_1 = ?$ **b)** $c_1 = c + v\left(1 - \frac{1}{n^2}\right)$ (1) $n = ?$ (2) $v = ?$

117. **a)** $D = \frac{Mmv^2}{2(M + m)}$ (1) $m = ?$ (2) $v = ?$ **b)** $E = \frac{m_1m_2}{2(m_1 + m_2)}(v_1^2 - v_2^2)$ (1) $m_1 = ?$ (2) $v_1 = ?$

118. **a)** $b^2x^2 + a^2y^2 = a^2b^2$ (1) $x = ?$ (2) $a = ?$ **b)** $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ (1) $b = ?$ (2) $y = ?$

119. **a)** $I = \frac{BH^3}{12} - \frac{bh^3}{12}$ (1) $h = ?$ (2) $H = ?$ **b)** $V = \frac{\pi r^4(p - p_0)\cdot t_0}{8\mu l}$ (1) $p = ?$ (2) $r = ?$

120. **a)** $K_n = K_0 \cdot r^n$ (1) $r = ?$ (2) $K_0 = ?$ **b)** $K_0 = K_n \cdot v^n$ (1) $K_n = ?$ (2) $v = ?$

121. **a)** $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

122. **a)** $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

123. **a)** $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

124. **a)** $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

125. **a)** $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

126. **a)** $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

127. **a)** $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

128. **a)** $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

129. **a)** $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$

130. **a)** $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$ (1) $a = ?$ (2) $b = ?$ **b)** $\left(\frac{a}{2}\sqrt{3}\right)^2 + \left(\frac{a}{2}\right)^2 = s^2$ (1) $a = ?$ (2) $s = ?$