

Eq. 1 has statement index 3121513111

$$k = \frac{2\pi}{\lambda} \quad (1)$$

Eq. 2 has statement index 5900595848

$$k = \frac{\omega}{v} \quad (2)$$

Eq. 3 has statement index 1293923844

$$\lambda = v T \quad (3)$$

Eq. 4 has statement index 0404050504

$$\lambda = \frac{v}{f} \quad (4)$$

Eq. 5 has statement index 0934990943

$$k = \frac{2\pi}{v T} \quad (5)$$

Eq. 6 has statement index 3131211131

$$\omega = 2\pi f \quad (6)$$

Eq. 7 has statement index 3131111133

$$T = 1/f \quad (7)$$

Eq. 8 has statement index 2131616531

$$T f = 1 \quad (8)$$

Eq. 9 has statement index 2113211456

$$f = 1/T \quad (9)$$

Eq. 10 has statement index 3132131132

$$\omega = \frac{2\pi}{T} \quad (10)$$

Eq. 11 has statement index 2569154141

$$\vec{\nabla} \times \frac{\partial}{\partial t} \vec{H} = \epsilon_0 \frac{\partial^2}{\partial t^2} \vec{E} \quad (11)$$

Eq. 12 has statement index 1314864131

$$\vec{\nabla} \times \vec{H} = \epsilon_0 \frac{\partial}{\partial t} \vec{E} \quad (12)$$

Eq. 13 has statement index 9492920340

$$y = \cos(x) + i \sin(x) \quad (13)$$

Eq. 14 has statement index 9429829482

$$\frac{d}{dx}y = -\sin(x) + i \cos(x) \quad (14)$$

Eq. 15 has statement index 9482984922

$$\frac{d}{dx}y = (i \sin(x) + \cos(x)) i \quad (15)$$

Eq. 16 has statement index 9848294829

$$\frac{d}{dx}y = y i \quad (16)$$

Eq. 17 has statement index 9848292229

$$dy = y i dx \quad (17)$$

Eq. 18 has statement index 9482113948

$$\frac{dy}{y} = i dx \quad (18)$$

Eq. 19 has statement index 9482943948

$$\log(y) = i dx \quad (19)$$

Eq. 20 has statement index 4928239482

$$\log(y) = i x \quad (20)$$

Eq. 21 has statement index 4923339482

$$i x = \log(y) \quad (21)$$

Eq. 22 has statement index 9482923849

$$\exp(i x) = y \quad (22)$$

Eq. 23 has statement index 4938429483

$$\exp(i x) = \cos(x) + i \sin(x) \quad (23)$$

Eq. 24 has statement index 4838429483

$$\exp(2i x) = \cos(2x) + i \sin(2x) \quad (24)$$

Eq. 25 has statement index 4638429483

$$\exp(2i x) = (\cos(x) + i \sin(x))(\cos(x) + i \sin(x)) \quad (25)$$

Eq. 26 has statement index 4598294821

$$\exp(2i x) = (\cos(x))^2 + 2i \cos(x) \sin(x) - (\sin(x))^2 \quad (26)$$

Eq. 27 has statement index 9483928192

$$\cos(2x) + i \sin(2x) = (\cos(x))^2 + 2i \cos(x) \sin(x) - (\sin(x))^2 \quad (27)$$

Eq. 28 has statement index 4858429483

$$\exp(i x) \exp(i x) = (\cos(x) + i \sin(x))(\cos(x) + i \sin(x)) \quad (28)$$

Eq. 29 has statement index 4954839242

$$\cos(2x) + i \sin(2x) = (\cos(x) + i \sin(x))(\cos(x) + i \sin(x)) \quad (29)$$

Eq. 30 has statement index 9482928242

$$\cos(2x) = (\cos(x))^2 - (\sin(x))^2 \quad (30)$$

Eq. 31 has statement index 9482928243

$$\cos(2x) + (\sin(x))^2 = (\cos(x))^2 \quad (31)$$

Eq. 32 has statement index 9482438243

$$(\cos(x))^2 = \cos(2x) + (\sin(x))^2 \quad (32)$$

Eq. 33 has statement index 5832984291

$$(\sin(x))^2 + (\cos(x))^2 = 1 \quad (33)$$

Eq. 34 has statement index 3285732911

$$(\cos(x))^2 = 1 - (\sin(x))^2 \quad (34)$$

Eq. 35 has statement index 4827492911

$$\cos(2x) + (\sin(x))^2 = 1 - (\sin(x))^2 \quad (35)$$

Eq. 36 has statement index 1248277773

$$\cos(2x) = 1 - 2(\sin(x))^2 \quad (36)$$

Eq. 37 has statement index 7572664728

$$\cos(2x) + 2(\sin(x))^2 = 1 \quad (37)$$

Eq. 38 has statement index 9889984281

$$2(\sin(x))^2 = 1 - \cos(2x) \quad (38)$$

Eq. 39 has statement index 9988949211

$$(\sin(x))^2 = \frac{1 - \cos(2x)}{2} \quad (39)$$

Eq. 40 has statement index 4978429483

$$\exp(-i x) = \cos(-x) + i \sin(-x) \quad (40)$$

Eq. 41 has statement index 4929218492

$$a + b = c \quad (41)$$

Eq. 42 has statement index 4929482992

$$b = 2 \quad (42)$$

Eq. 43 has statement index 4984892984

$$a + 2 = c \quad (43)$$

Eq. 44 has statement index 2948293829

$$a = b \quad (44)$$

Eq. 45 has statement index 9482948292

$$b = c \quad (45)$$

Eq. 46 has statement index 4828238421

$$a = c \quad (46)$$

Eq. 47 has statement index 9829420421

$$b = a \quad (47)$$

Eq. 48 has statement index 9999999965

$$E = \omega \hbar \quad (48)$$

Eq. 49 has statement index 9999999964

$$\omega = ck \quad (49)$$

Eq. 50 has statement index 9999999963

$$\lambda = h/p \quad (50)$$

Eq. 51 has statement index 9999999962

$$p = \hbar k \quad (51)$$

Eq. 52 has statement index 9999999960

$$\hbar = h/(2\pi) \quad (52)$$

Eq. 53 has statement index 9999999957

$$\vec{F} = -\vec{\nabla} V \quad (53)$$

Eq. 54 has statement index 9999999956

$$\vec{F} = \frac{\partial}{\partial t} \vec{p} \quad (54)$$

Eq. 55 has statement index 9999999955

$$\vec{E} = -\vec{\nabla} \Psi \quad (55)$$

Eq. 56 has statement index 9999999954

$$c = 1/\sqrt{\epsilon_0 \mu_0} \quad (56)$$

Eq. 57 has statement index 9999999953

$$\int_{-\infty}^{\infty} \delta(x) dx = 1 \quad (57)$$

Eq. 58 has statement index 9999999952

$$f(x)\delta(x-a) = f(a) \quad (58)$$

Eq. 59 has statement index 9999999951

$$\langle x|k \rangle = \frac{\exp(ikx)}{\sqrt{2\pi}} \quad (59)$$

Eq. 60 has statement index 9999999950

$$\beta = 1/(k_{Boltzmann} T) \quad (60)$$

Eq. 61 has statement index 9999999999

$$Newton = kilogram * meter / (second^2) \quad (61)$$

Eq. 62 has statement index 9999999998

$$Joule = Newton * meter \quad (62)$$

Eq. 63 has statement index 9999999997

$$Watt = Joule/second \quad (63)$$

Eq. 64 has statement index 9999999996

$$Coulomb = Ampere/second \quad (64)$$

Eq. 65 has statement index 9999999995

$$Volt = Joule/Coulumb \quad (65)$$

Eq. 66 has statement index 9999999993

$$Farad = Coulumb/Volt \quad (66)$$

Eq. 67 has statement index 9999999992

$$Tesla = Newton/(Ampere * meter) \quad (67)$$

Eq. 68 has statement index 9999999991

$$Pascal = Newton/(meter^2) \quad (68)$$

Eq. 69 has statement index 9999999990

$$Tesla = 10000 * Gauss \quad (69)$$

Eq. 70 has statement index 9999999989

$$mass_{electron} = 511000electronVolts/(q^2) \quad (70)$$

Eq. 71 has statement index 9999999988

$$1atmosphere = 14.7pounds/(inch^2) \quad (71)$$

Eq. 72 has statement index 9999999987

$$1atmosphere = 101.325Pascal \quad (72)$$

Eq. 73 has statement index 9999999986

$$\begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix} \begin{bmatrix} A_x \\ A_y \end{bmatrix} = \begin{bmatrix} A_{x'} \\ A_{y'} \end{bmatrix} \quad (73)$$

Eq. 74 has statement index 9999999985

$$V = IR \quad (74)$$

Eq. 75 has statement index 9999999984

$$Q = CV \quad (75)$$

Eq. 76 has statement index 9999999983

$$C = VA/d \quad (76)$$

Eq. 77 has statement index 9999999982

$$V = IR + Q/C + L \frac{\partial I}{\partial t} \quad (77)$$

Eq. 78 has statement index 9999999981

$$\vec{\nabla} \cdot \vec{E} = \rho/\epsilon_0 \quad (78)$$

Eq. 79 has statement index 9919999981

$$\rho = 0 \quad (79)$$

Eq. 80 has statement index 9999999980

$$\vec{\nabla} \cdot \vec{B} = 0 \quad (80)$$

Eq. 81 has statement index 9999999979

$$\vec{\nabla} \times \vec{E} = -\frac{\partial \vec{B}}{\partial t} \quad (81)$$

Eq. 82 has statement index 9991999979

$$\vec{\nabla} \times \vec{E} = -\mu_0 \frac{\partial \vec{H}}{\partial t} \quad (82)$$

Eq. 83 has statement index 9999999978

$$\vec{\nabla} \times \vec{B} = \mu_0 \vec{J} + \mu_0 \epsilon_0 \frac{\partial E}{\partial t} \quad (83)$$

Eq. 84 has statement index 9999999977

$$[\hat{x}, \hat{p}] = i\hbar \quad (84)$$

Eq. 85 has statement index 9999999976

$$\hat{p} = -i\hbar \frac{\partial}{\partial x} \quad (85)$$

Eq. 86 has statement index 9999999974

$$\langle \psi | \hat{A} | \psi \rangle = \int_{-\infty}^{\infty} \psi^* A \psi \, dx \quad (86)$$

Eq. 87 has statement index 9999999973

$$(\Delta A)^2 = \langle A^2 \rangle - \langle A \rangle^2 \quad (87)$$

Eq. 88 has statement index 9999999972

$$\mathcal{H}|\psi\rangle = E|\psi\rangle \quad (88)$$

Eq. 89 has statement index 9999999971

$$\mathcal{H} = \frac{p^2}{2m} + V \quad (89)$$

Eq. 90 has statement index 9999999970

$$\eta_1 \sin \theta_1 = \eta_2 \sin \theta_2 \quad (90)$$

Eq. 91 has statement index 9999999967

$$\vec{S} = \frac{1}{\mu_0} \vec{E} \times \vec{B} \quad (91)$$

Eq. 92 has statement index 9999999966

$$\vec{L} = \vec{r} \times \vec{p} \quad (92)$$

Eq. 93 has statement index 9999999969

$$x = \frac{-b + \sqrt{b^2 - 4ac}}{2a} \quad (93)$$

Eq. 94 has statement index 9999999968

$$x = \frac{-b - \sqrt{b^2 - 4ac}}{2a} \quad (94)$$

Eq. 95 has statement index 8582954722

$$x^2 + 2xh + h^2 = (x + h)^2 \quad (95)$$

Eq. 96 has statement index 9285928292

$$ax^2 + bx + c = 0 \quad (96)$$

Eq. 97 has statement index 5958392859

$$x^2 + (b/a)x + (c/a) = 0 \quad (97)$$

Eq. 98 has statement index 5938459282

$$x^2 + (b/a)x = -c/a \quad (98)$$

Eq. 99 has statement index 5928292841

$$x^2 + (b/a)x + (b/(2a))^2 = -c/a + (b/(2a))^2 \quad (99)$$



Eq. 100 has statement index 5928285821

$$x^2 + 2x(b/(2a)) + (b/(2a))^2 = (x + (b/(2a)))^2 \quad (100)$$

Eq. 101 has statement index 5959282914

$$x^2 + x(b/a) + (b/(2a))^2 = (x + (b/(2a)))^2 \quad (101)$$

Eq. 102 has statement index 9385938295

$$(x + (b/(2a)))^2 = -(c/a) + (b/(2a))^2 \quad (102)$$

Eq. 103 has statement index 9582958294

$$x + (b/(2a)) = \sqrt{(b/(2a))^2 - (c/a)} \quad (103)$$

Eq. 104 has statement index 5982958249

$$x + (b/(2a)) = -\sqrt{(b/(2a))^2 - (c/a)} \quad (104)$$

Eq. 105 has statement index 9582958293

$$x = \sqrt{(b/(2a))^2 - (c/a)} - (b/(2a)) \quad (105)$$

Eq. 106 has statement index 5982958248

$$x = -\sqrt{(b/(2a))^2 - (c/a)} - (b/(2a)) \quad (106)$$

Eq. 107 has statement index 5727578862

$$\frac{d^2}{dx^2}\psi(x) = -k^2\psi(x) \quad (107)$$

Eq. 108 has statement index 8582885111

$$\psi(x) = a \sin(kx) + b \cos(kx) \quad (108)$$

Eq. 109 has statement index 9585727710

$$\psi(x) = 0 \text{ when } x = 0 \quad (109)$$

Eq. 110 has statement index 9495857278

$$\psi(x) = 0 \text{ when } x = W \quad (110)$$

Eq. 111 has statement index 8577275751

$$0 = a \sin(0) + b \cos(0) \quad (111)$$

Eq. 112 has statement index 1293913110

$$0 = b \quad (112)$$

Eq. 113 has statement index 9059289981

$$\psi(x) = a \sin(kx) \quad (113)$$

Eq. 114 has statement index 1020010291

$$0 = a \sin(kW) \quad (114)$$

Eq. 115 has statement index 1857710291

$$0 = a \sin(n\pi) \text{ when } n \in \text{Integer} \quad (115)$$

Eq. 116 has statement index 1010923823

$$kW = n\pi \text{ when } n \in \text{Integer} \quad (116)$$

Eq. 117 has statement index 1858772113

$$k = \frac{n\pi}{W} \text{ when } n \in \text{Integer} \quad (117)$$

Eq. 118 has statement index 2944838499

$$\psi(x) = a \sin\left(\frac{n\pi}{W}x\right) \text{ when } n \in \text{Integer} \quad (118)$$

Eq. 119 has statement index 8849289982

$$\psi(x)^* = a \sin\left(\frac{n\pi}{W}x\right) \text{ when } n \in \text{Integer} \quad (119)$$

Eq. 120 has statement index 1934748140

$$\int |\psi(x)|^2 dx = 1 \quad (120)$$

Eq. 121 has statement index 8572657110

$$1 = \int |\psi(x)|^2 dx \quad (121)$$

Eq. 122 has statement index 4857472413

$$1 = \int \psi(x)\psi(x)^* dx \quad (122)$$

Eq. 123 has statement index 0203024440

$$1 = \int_0^W a \sin\left(\frac{n\pi}{W}x\right)\psi(x)^* dx \text{ when } n \in \text{Integer} \quad (123)$$

Eq. 124 has statement index 8889444440

$$1 = \int_0^W a^2 \left(\sin\left(\frac{n\pi}{W}x\right)\right)^2 dx \text{ when } n \in \text{Integer} \quad (124)$$

Eq. 125 has statement index 7575738420

$$\left(\sin\left(\frac{n\pi}{W}x\right)\right)^2 = \frac{1 - \cos\left(2\frac{n\pi}{W}x\right)}{2} \quad (125)$$

Eq. 126 has statement index 8576785890

$$1 = \int_0^W a^2 \frac{1 - \cos\left(2\frac{n\pi}{W}x\right)}{2} dx \text{ when } n \in \text{Integer} \quad (126)$$

Eq. 127 has statement index 9858028950

$$\frac{1}{a^2} = \int_0^W \frac{1 - \cos\left(2\frac{n\pi}{W}x\right)}{2} dx \text{ when } n \in \text{Integer} \quad (127)$$

Eq. 128 has statement index 1202310110

$$\frac{1}{a^2} = \int_0^W \frac{1}{2} dx - \frac{1}{2} \int_0^W \cos\left(2\frac{n\pi}{W}x\right) dx \text{ when } n \in \text{Integer} \quad (128)$$

Eq. 129 has statement index 0948572140

$$\int \cos(ax) dx = \frac{1}{a} \sin(ax) \quad (129)$$

Eq. 130 has statement index 7564894985

$$\int \cos\left(\frac{2n\pi}{W}x\right) dx = \frac{W}{2n\pi} \sin\left(\frac{2n\pi}{W}x\right) \quad (130)$$

Eq. 131 has statement index 5857434758

$$\int a dx = ax \quad (131)$$

Eq. 132 has statement index 8575746378

$$\int \frac{1}{2} dx = \frac{1}{2}x \quad (132)$$

Eq. 133 has statement index 1202312210

$$\frac{1}{a^2} = \frac{1}{2}W - \frac{1}{2} \int_0^W \cos\left(2\frac{n\pi}{W}x\right) dx \text{ when } n \in \text{Integer} \quad (133)$$

Eq. 134 has statement index 0439492440

$$\frac{1}{a^2} = \frac{1}{2}W - \frac{1}{2} \frac{W}{2n\pi} \sin\left(\frac{2n\pi}{W}x\right) \Big|_0^W \text{ when } n \in \text{Integer} \quad (134)$$

Eq. 135 has statement index 4857475848

$$\frac{1}{a^2} = \frac{W}{2} \quad (135)$$

Eq. 136 has statement index 8485867742

$$\frac{2}{W} = a^2 \quad (136)$$

Eq. 137 has statement index 9485747245

$$\sqrt{\frac{2}{W}} = a \quad (137)$$

Eq. 138 has statement index 9485747246

$$-\sqrt{\frac{2}{W}} = a \quad (138)$$

Eq. 139 has statement index 9393939992

$$\psi(x) = \sqrt{\frac{2}{W}} \sin\left(\frac{n\pi}{W}x\right) \text{ when } n \in \text{Integer} \quad (139)$$

Eq. 140 has statement index 9393939991

$$\psi(x) = -\sqrt{\frac{2}{W}} \sin\left(\frac{n\pi}{W}x\right) \text{ when } n \in \text{Integer} \quad (140)$$

Eq. 141 has statement index 8575748999

$$\frac{d^2}{dx^2} (a \sin(kx) + b \cos(kx)) = -k^2 (a \sin(kx) + b \cos(kx)) \quad (141)$$

Eq. 142 has statement index 8485757728

$$a \frac{d^2}{dx^2} \sin(kx) + b \frac{d^2}{dx^2} \cos(kx) = -ak^2 \sin(kx) + -bk^2 \cos(kx) \quad (142)$$

Eq. 143 has statement index 8484544728

$$-ak^2 \sin(kx) + -bk^2 \cos(kx) = -ak^2 \sin(kx) + -bk^2 \cos(kx) \quad (143)$$

Eq. 144 has statement index 1314464131

$$\vec{\nabla} \times \frac{\partial \vec{H}}{\partial t} = \epsilon_0 \frac{\partial^2 \vec{E}}{\partial t^2} \quad (144)$$

Eq. 145 has statement index 9291999979

$$\vec{\nabla} \times \vec{\nabla} \times \vec{E} = -\mu_0 \vec{\nabla} \times \frac{\partial \vec{H}}{\partial t} \quad (145)$$

Eq. 146 has statement index 3947269979

$$\vec{\nabla} \times \vec{\nabla} \times \vec{E} = -\mu_0 \epsilon_0 \frac{\partial^2 \vec{E}}{\partial t^2} \quad (146)$$

Eq. 147 has statement index 7466829492

$$\vec{\nabla} \cdot \vec{E} = 0 \quad (147)$$

Eq. 148 has statement index 7575859295

$$\vec{\nabla} \times \vec{\nabla} \times \vec{E} = \vec{\nabla}(\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (148)$$

Eq. 149 has statement index 1636453295

$$\vec{\nabla} \times \vec{\nabla} \times \vec{E} = -\nabla^2 \vec{E} \quad (149)$$

Eq. 150 has statement index 8494839423

$$\nabla^2 \vec{E} = \mu_0 \epsilon_0 \frac{\partial^2 \vec{E}}{\partial t^2} \quad (150)$$

Eq. 151 has statement index 8572852424

$$\vec{E} = E(\vec{r}, t) \quad (151)$$

Eq. 152 has statement index 9499428242

$$E(\vec{r}, t) = E(\vec{r}) \exp(i\omega t) \quad (152)$$

Eq. 153 has statement index 9394939493

$$\nabla^2 E(\vec{r}, t) = \mu_0 \epsilon_0 \frac{\partial^2}{\partial t^2} E(\vec{r}, t) \quad (153)$$

Eq. 154 has statement index 2029293929

$$\nabla^2 E(\vec{r}) \exp(i\omega t) = \mu_0 \epsilon_0 \frac{\partial^2}{\partial t^2} E(\vec{r}) \exp(i\omega t) \quad (154)$$

Eq. 155 has statement index 4985825552

$$\nabla^2 E(\vec{r}) \exp(i\omega t) = i\omega \mu_0 \epsilon_0 \frac{\partial}{\partial t} E(\vec{r}) \exp(i\omega t) \quad (155)$$

Eq. 156 has statement index 1858578388

$$\nabla^2 E(\vec{r}) \exp(i\omega t) = -\omega^2 \mu_0 \epsilon_0 E(\vec{r}) \exp(i\omega t) \quad (156)$$

Eq. 157 has statement index 4585828572

$$\epsilon_0 \mu_0 = \frac{1}{c^2} \quad (157)$$

Eq. 158 has statement index 9485384858

$$\nabla^2 E(\vec{r}) \exp(i\omega t) = -\frac{\omega^2}{c^2} E(\vec{r}) \exp(i\omega t) \quad (158)$$

Eq. 159 has statement index 3485475729

$$\nabla^2 E(\vec{r}) = -\frac{\omega^2}{c^2} E(\vec{r}) \quad (159)$$

Eq. 160 has statement index 2394853829

$$\exp(-i x) = \cos(-x) + i \sin(-x) \quad (160)$$

Eq. 161 has statement index 4938429482

$$\exp(-i x) = \cos(x) + i \sin(-x) \quad (161)$$

Eq. 162 has statement index 4938429484

$$\exp(-i x) = \cos(x) - i \sin(x) \quad (162)$$

Eq. 163 has statement index 4742644828

$$\exp(i x) + \exp(-i x) = 2 \cos(x) \quad (163)$$

Eq. 164 has statement index 3829492824

$$\frac{1}{2} (\exp(i x) + \exp(-i x)) = \cos(x) \quad (164)$$

Eq. 165 has statement index 4585932229

$$\cos(x) = \frac{1}{2} (\exp(i x) + \exp(-i x)) \quad (165)$$

Eq. 166 has statement index 2123139121

$$-\exp(-i x) = -\cos(x) + i \sin(x) \quad (166)$$

Eq. 167 has statement index 3942849294

$$\exp(i x) - \exp(-i x) = 2i \sin(x) \quad (167)$$

Eq. 168 has statement index 4843995999

$$\frac{1}{2i} (\exp(i x) - \exp(-i x)) = \sin(x) \quad (168)$$

Eq. 169 has statement index 2103023049

$$\sin(x) = \frac{1}{2i} (\exp(i x) - \exp(-i x)) \quad (169)$$

Eq. 170 has statement index 8489593958

$$d(u \ v) = u \ dv + v \ du \quad (170)$$

Eq. 171 has statement index 8489593960

$$d(u \ v) - v \ du = u \ dv \quad (171)$$

Eq. 172 has statement index 8489593962

$$u \ dv = d(u \ v) - v \ du \quad (172)$$

Eq. 173 has statement index 8489593964

$$\int u \ dv = u \ v - \int v \ du \quad (173)$$

Eq. 174 has statement index 7575859300

$$\epsilon^{i,j,k} \hat{x}_i \nabla_j (\vec{\nabla} \times \vec{E})_k = \vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (174)$$

Eq. 175 has statement index 7575859302

$$\epsilon^{i,j,k} \epsilon_{n,j,k} \hat{x}_i \nabla_j \nabla^m E^n = \vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (175)$$

Eq. 176 has statement index 7575859304

$$\epsilon^{i,j,k} \epsilon_{n,j,k} = \delta^l{}_j \delta^m{}_k - \delta^l{}_k \delta^m{}_j \quad (176)$$

Eq. 177 has statement index 7575859306

$$(\delta^l{}_j \delta^m{}_k - \delta^l{}_k \delta^m{}_j) \hat{x}_i \nabla_j \nabla^m E^n = \vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (177)$$

Eq. 178 has statement index 7575859308

$$(\delta^l{}_j \delta^m{}_k \hat{x}_i \nabla_j \nabla^m E^n) - (\delta^l{}_k \delta^m{}_j \hat{x}_i \nabla_j \nabla^m E^n) = \vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (178)$$

Eq. 179 has statement index 7575859310

$$\hat{x}_m \nabla_n \nabla^m E^n - \hat{x}_n \nabla_m \nabla^m E^n = \vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (179)$$

Eq. 180 has statement index 7575859312

$$\vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) = \vec{\nabla} (\vec{\nabla} \cdot \vec{E} - \nabla^2 \vec{E}) \quad (180)$$

Eq. 181 has statement index 1020394900

$$p = h/\lambda \quad (181)$$

Eq. 182 has statement index 1020394902

$$E = hf \quad (182)$$

Eq. 183 has statement index 3147472131

$$\frac{\omega}{2\pi} = f \quad (183)$$

Eq. 184 has statement index 4147472132

$$E = \frac{h\omega}{2\pi} \quad (184)$$

Eq. 185 has statement index 1029039903

$$p = mv \quad (185)$$

Eq. 186 has statement index 9999999961

$$\frac{E}{\hbar} = \omega \quad (186)$$

Eq. 187 has statement index 3121234211

$$\frac{k}{2\pi} = \lambda \quad (187)$$

Eq. 188 has statement index 3121234212

$$p = \frac{hk}{2\pi} \quad (188)$$

Eq. 189 has statement index 9999999870

$$\frac{p}{\hbar} = k \quad (189)$$

Eq. 190 has statement index 9999998870

$$\frac{\vec{p}}{\hbar} = \vec{k} \quad (190)$$

Eq. 191 has statement index 3948574224

$$\psi(\vec{r}, t) = \psi_0 \exp \left( i \left( \vec{k} \cdot \vec{r} - \omega t \right) \right) \quad (191)$$

Eq. 192 has statement index 3948574226

$$\psi(\vec{r}, t) = \psi_0 \exp \left( i \left( \frac{\vec{p} \cdot \vec{r}}{\hbar} - \omega t \right) \right) \quad (192)$$

Eq. 193 has statement index 3948574228

$$\psi(\vec{r}, t) = \psi_0 \exp \left( i \left( \frac{\vec{p} \cdot \vec{r}}{\hbar} - \frac{Et}{\hbar} \right) \right) \quad (193)$$



Eq. 194 has statement index 3948574230

$$\psi(\vec{r}, t) = \psi_0 \exp \left( \frac{i}{\hbar} (\vec{p} \cdot \vec{r} - Et) \right) \quad (194)$$

Eq. 195 has statement index 4298359835

$$E = \frac{1}{2}mv^2 \quad (195)$$

Eq. 196 has statement index 4298359845

$$E = \frac{1}{2m}m^2v^2 \quad (196)$$

Eq. 197 has statement index 4298359851

$$E = \frac{p^2}{2m} \quad (197)$$

Eq. 198 has statement index 1029039904

$$p^2 = m^2v^2 \quad (198)$$

Eq. 199 has statement index 3948574233

$$\frac{\partial}{\partial t}\psi(\vec{r}, t) = \psi_0 \frac{\partial}{\partial t} \exp \left( i \left( \frac{\vec{p} \cdot \vec{r}}{\hbar} - \frac{Et}{\hbar} \right) \right) \quad (199)$$

Eq. 200 has statement index 3948574235

$$\frac{\partial}{\partial t}\psi(\vec{r}, t) = \frac{-i}{\hbar}E\psi_0 \exp \left( i \left( \frac{\vec{p} \cdot \vec{r}}{\hbar} - \frac{Et}{\hbar} \right) \right) \quad (200)$$

Eq. 201 has statement index 3948571256

$$\frac{\partial}{\partial t}\psi(\vec{r}, t) = \frac{-i}{\hbar}E\psi(\vec{r}, t) \quad (201)$$

Eq. 202 has statement index 4348571256

$$\frac{\partial}{\partial t}\psi(\vec{r}, t) = \frac{-i}{\hbar} \frac{p^2}{2m} \psi(\vec{r}, t) \quad (202)$$

Eq. 203 has statement index 4341171256

$$i\hbar \frac{\partial}{\partial t}\psi(\vec{r}, t) = \frac{p^2}{2m} \psi(\vec{r}, t) \quad (203)$$

Eq. 204 has statement index 3948572230

$$\vec{\nabla}\psi(\vec{r}, t) = \psi_0 \vec{\nabla} \exp \left( \frac{i}{\hbar} (\vec{p} \cdot \vec{r} - Et) \right) \quad (204)$$

Eq. 205 has statement index 4943571230

$$\vec{\nabla}\psi(\vec{r}, t) = \frac{i}{\hbar}\vec{p}\psi_0 \exp\left(\frac{i}{\hbar}(\vec{p} \cdot \vec{r} - Et)\right) \quad (205)$$

Eq. 206 has statement index 5985371230

$$\vec{\nabla}\psi(\vec{r}, t) = \frac{i}{\hbar}\vec{p}\psi(\vec{r}, t) \quad (206)$$

Eq. 207 has statement index 4394958389

$$\vec{\nabla} \cdot \left( \vec{\nabla}\psi(\vec{r}, t) \right) = \frac{i}{\hbar} \vec{\nabla} \cdot (\vec{p}\psi(\vec{r}, t)) \quad (207)$$

Eq. 208 has statement index 1648958381

$$\nabla^2\psi(\vec{r}, t) = \frac{i}{\hbar}\vec{p} \cdot \left( \vec{\nabla}\psi(\vec{r}, t) \right) \quad (208)$$

Eq. 209 has statement index 2648958382

$$\nabla^2\psi(\vec{r}, t) = \frac{i}{\hbar}\vec{p} \cdot \left( \frac{i}{\hbar}\vec{p}\psi(\vec{r}, t) \right) \quad (209)$$

Eq. 210 has statement index 2395958385

$$\nabla^2\psi(\vec{r}, t) = \frac{-p^2}{\hbar}\psi(\vec{r}, t) \quad (210)$$

Eq. 211 has statement index 5868688585

$$\frac{-\hbar^2}{2m}\nabla^2\psi(\vec{r}, t) = \frac{p^2}{2m}\psi(\vec{r}, t) \quad (211)$$

Eq. 212 has statement index 9958485859

$$\frac{-\hbar^2}{2m}\nabla^2\psi(\vec{r}, t) = i\hbar\frac{\partial}{\partial t}\psi(\vec{r}, t) \quad (212)$$

Eq. 213 has statement index 1158485859

$$\frac{-\hbar^2}{2m}\nabla^2 = \mathcal{H} \quad (213)$$

Eq. 214 has statement index 2258485859

$$\mathcal{H}\psi(\vec{r}, t) = i\hbar\frac{\partial}{\partial t}\psi(\vec{r}, t) \quad (214)$$

Eq. 215 has statement index 9596004948

$$x = \langle \psi_\alpha | \hat{A} | \psi_\beta \rangle \quad (215)$$

Eq. 216 has statement index 1010393944

$$x = \langle \psi_\alpha | a_\beta | \psi_\beta \rangle \quad (216)$$

Eq. 217 has statement index 1395858355

$$x = \langle \psi_\alpha | a_\alpha | \psi_\beta \rangle \quad (217)$$

Eq. 218 has statement index 2394240499

$$x = a_\beta \langle \psi_\alpha | \psi_\beta \rangle \quad (218)$$

Eq. 219 has statement index 3943939590

$$x = a_\alpha \langle \psi_\alpha | \psi_\beta \rangle \quad (219)$$

Eq. 220 has statement index 1203938249

$$a_\beta \langle \psi_\alpha | \psi_\beta \rangle = a_\alpha \langle \psi_\alpha | \psi_\beta \rangle \quad (220)$$

Eq. 221 has statement index 3924948349

$$a_\beta \langle \psi_\alpha | \psi_\beta \rangle - a_\alpha \langle \psi_\alpha | \psi_\beta \rangle = 0 \quad (221)$$

Eq. 222 has statement index 2394935831

$$(a_\beta - a_\alpha) \langle \psi_\alpha | \psi_\beta \rangle = 0 \quad (222)$$

Eq. 223 has statement index 9999999975

$$\langle \psi | \hat{A} | \psi \rangle = \langle a \rangle \quad (223)$$

Eq. 224 has statement index 2394935835

$$\left( \langle \psi | \hat{A} | \psi \rangle \right)^+ = (\langle a \rangle)^+ \quad (224)$$

Eq. 225 has statement index 1010393913

$$\langle \psi | \hat{A}^+ | \psi \rangle = \langle a \rangle^* \quad (225)$$

Eq. 226 has statement index 9294858532

$$\hat{A}^+ = \hat{A} \quad (226)$$

Eq. 227 has statement index 4948934890

$$\langle \psi | \hat{A} | \psi \rangle = \langle a \rangle^* \quad (227)$$

Eq. 228 has statement index 2848934890

$$\langle a \rangle^* = \langle a \rangle \quad (228)$$

Eq. 229 has statement index 3585845894

$$\langle (x - \langle x \rangle)^2 \rangle = \langle x^2 \rangle - \langle x \rangle^2 \quad (229)$$

Eq. 230 has statement index 8399484849

$$\langle x^2 - 2x\langle x \rangle + \langle x \rangle^2 \rangle = \langle x^2 \rangle - \langle x \rangle^2 \quad (230)$$

Eq. 231 has statement index 2404934990

$$\langle x^2 \rangle - 2\langle x \rangle \langle x \rangle + \langle x \rangle^2 = \langle x^2 \rangle - \langle x \rangle^2 \quad (231)$$

Eq. 232 has statement index 4949359835

$$\langle x^2 \rangle - 2\langle x^2 \rangle + \langle x \rangle^2 = \langle x^2 \rangle - \langle x \rangle^2 \quad (232)$$

Eq. 233 has statement index 2494533900

$$\langle x^2 \rangle - \langle x \rangle^2 = \langle x^2 \rangle - \langle x \rangle^2 \quad (233)$$

Eq. 234 has statement index 1638282134

$$\vec{p}_{before} = \vec{p}_{after} \quad (234)$$

Eq. 235 has statement index 8257621077

$$\vec{p}_{before} = \vec{p}_1 \quad (235)$$

Eq. 236 has statement index 8311458118

$$\vec{p}_{after} = \vec{p}_2 + \vec{p}_{electron} \quad (236)$$

Eq. 237 has statement index 3951205425

$$\vec{p}_{after} = \vec{p}_1 \quad (237)$$

Eq. 238 has statement index 8139187332

$$\vec{p}_1 = \vec{p}_2 + \vec{p}_{electron} \quad (238)$$

Eq. 239 has statement index 5530148480

$$\vec{p}_1 - \vec{p}_2 = \vec{p}_{electron} \quad (239)$$

Eq. 240 has statement index 7917051060

$$\vec{p}_{electron} = \vec{p}_1 - \vec{p}_2 \quad (240)$$

Eq. 241 has statement index 6742123016

$$\vec{p}_{electron} \cdot \vec{p}_{electron} = (\vec{p}_1 \cdot \vec{p}_1) + (\vec{p}_2 \cdot \vec{p}_2) - 2(\vec{p}_1 \cdot \vec{p}_2) \quad (241)$$