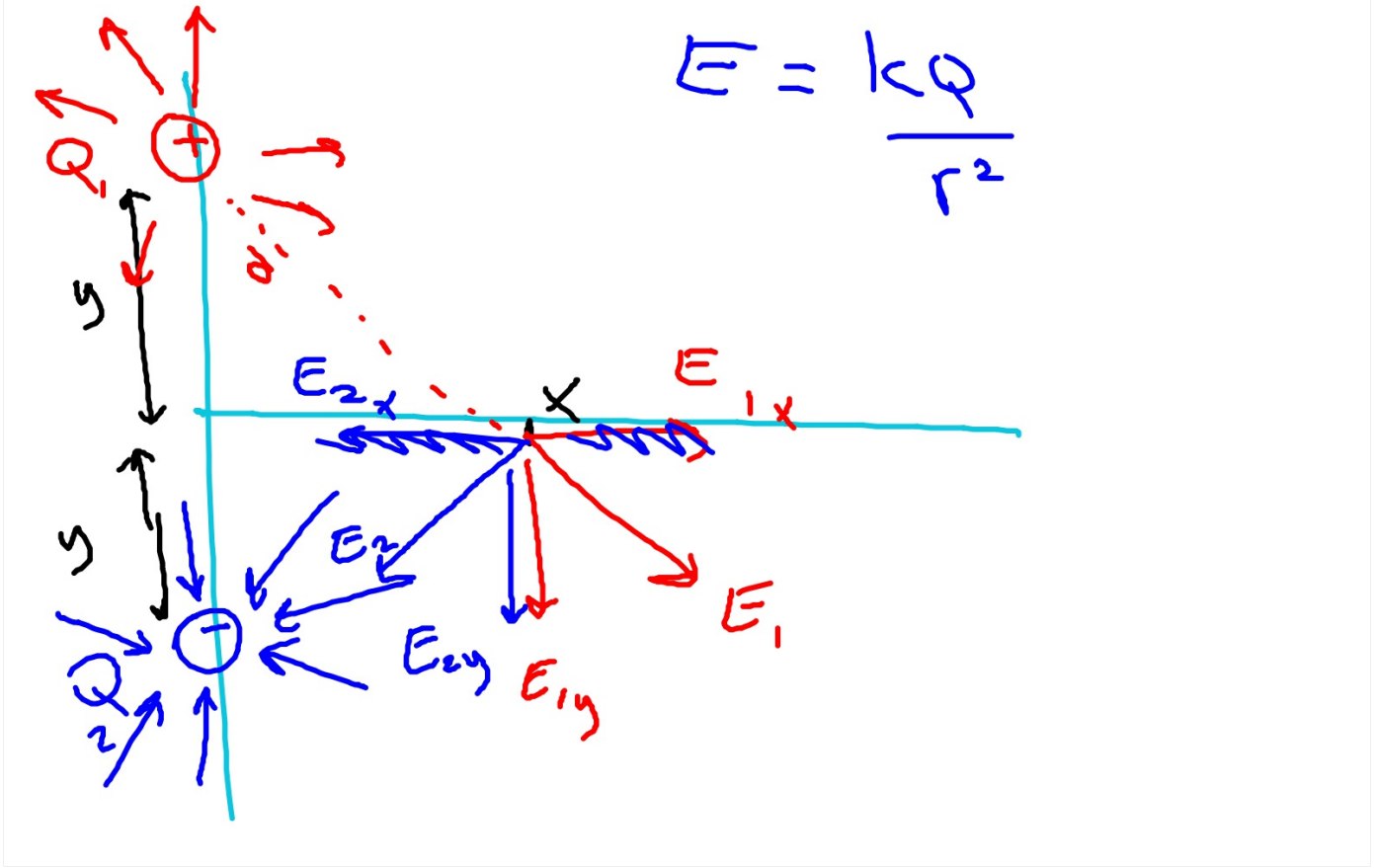
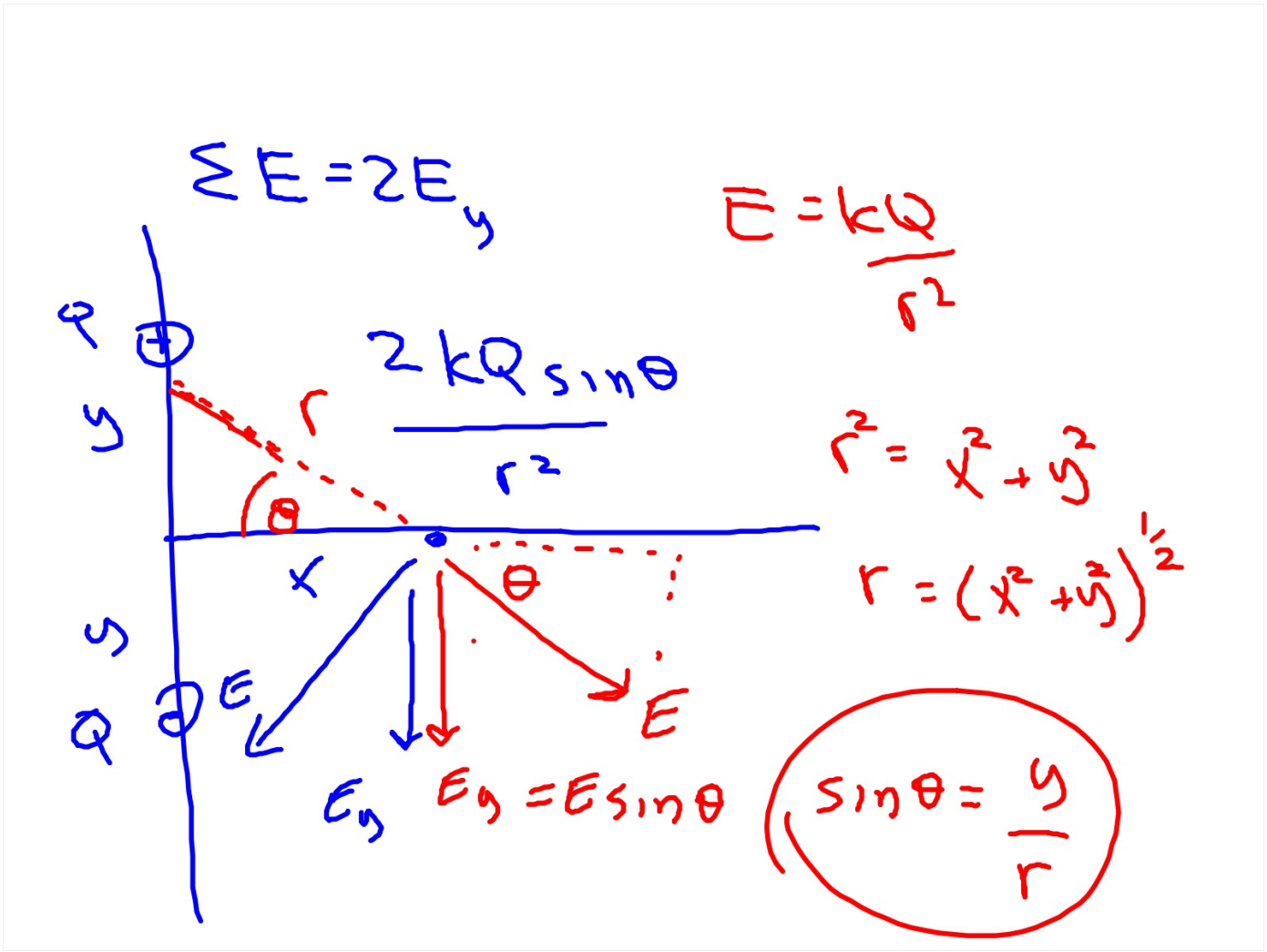

$E = \frac{kQ}{r^2}$
Q_1
y
d
E_{2x}
E_{1x}
x
y
E_2
E_1
E_{2y}
E_{1y}
Q_2

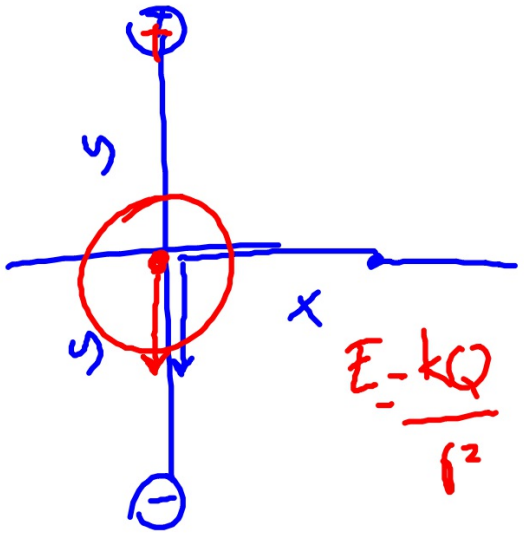

ΣE = 2E_y
E = kQ / r²
q
y
r
θ
2kQ sinθ / r²
r² = x² + y²
r = (x² + y²)^½
x
θ
Q
y
E
E
E_y
E_y = E sinθ
sinθ = y / r

$$\frac{2kQ\sin\theta}{r^2} = \frac{2kQy}{r^3}$$

$$r = (x^2+y^2)^{\frac{1}{2}\cdot 3}$$

$$\boxed{\frac{2kQy}{(x^2+y^2)^{3/2}}}$$

$$\frac{2kQy}{(x^2+y^2)^{3/2}}$$



$$E = \frac{kQ}{r^2}$$

$$\downarrow \frac{kQ}{y^2} + \frac{kQ}{y^2} = \frac{2kQ}{y^2}$$