$a = 7$

$a = 12t - 2$

$a = 10 + 3t - t^2$, the object is initially at the origin and at rest

$r = 2\frac{1}{3}t^3 i + (3t^2 - \frac{1}{3}t^2)j$

s^2

$(i + 2j) + (2i + 3j)$

$x = 1 + 2t + 2\frac{1}{3}t^3 - \frac{1}{6}t^4$

$u = 10, a = 2, t = 10$

Projectile $u = 4ms^{-1}$ *horizontally*

v

$x = 5t^2 + \frac{1}{2}t^3 - \frac{1}{12}t^4$

$v = 2 + 2t^2 - \frac{2}{3}t^3$

$v = 22$

$v = 2 - 2t$

$s = -4t + t^2$

$s = 200$

$v = 2, u = 12, s = 7$

$v = -4.9t^2$

$|4i + 6j|$

$s = 120$

$-43i + 25j$

$(3i + 4j) - (4i - 3j)$

$-200i - 346j$

25

$a = 10 - 6t,\ t=1,\ x=0\ \&v=-5$

$v = 2t^2i + (6t - t^2)j$

$\sqrt{13}$

$113i + 65j$

$-i + 7j$

$v = 10t + \frac{3}{2}t^2 - \frac{1}{3}t^3$

Projectile $u = 2i + 5j$

$3i + 5j$

$v = 20,\ u = 4,\ t = 10$

$s = 120$

$9.8ms^{-2}$

$s + c$

Projectile $10ms^{-1}$ *at* $35°$ *above the horizontal*

$z = t,\ t = 2,\ a = 6,\ u = 10$

$v = 4t + 3$

$\int a\,dt$

$x = 8.2t$

$v = 7t - 5$

$v = 2t - 4$

$\overrightarrow{OA} = 3i + 4j,\ \overrightarrow{OB} = 6i - 7j$

$v = 3t^2 - 10t$

$x = t^3 - 5t^2 + 4$

$a = -10$

$v = 22$