1. A plane starts from rest and travels 800m down a runway in 14 seconds. What is the acceleration of the plane?

$s = 800m$ $t = 14s$ $a - ?$	*Solution.* In case of the movement with the constant acceleration a from the rest, the distance in the time t equals: $s = \frac{at^2}{2}$.

One can find the acceleration: $\boxed{a = \frac{2s}{t^2}}$.

Let check the dimension:

$[a] = \frac{m}{s^2}$.

Let evaluate the quantity:

$a = \frac{2 \cdot 800}{14^2} = 8.16\left(\frac{m}{s^2}\right)$.

Answer: $8.16\frac{m}{s^2}$.