

A call came into Messina's. The Venutian PLACED AN ORDER FOR DELIVERY. IT ORDERED 7 PIZZAS that had a total mass of 18.9 kg. What will the PIZZAS' weigh ON Venus?

① Venus  $m = 18.9 \text{ kg}$   $W = ?$   
 $g_{\text{venus}} = 8.9 \text{ m/s}^2$

②  $W = mg$

③  $W = (18.9 \text{ kg})(8.9 \text{ m/s}^2)$

④  $W = 168.21 \text{ N}$

acceleration	$\text{m/s}^2$	V	$25 \text{ m/s}^2$
Weight	N	V	$25 \text{ N} \downarrow$
FORCE	N	V	$25 \text{ N} \uparrow$
MASS	kg	S	$25 \text{ kg}$
gravity	$\text{m/s}^2$	V	$25 \text{ m/s}^2 \downarrow$
	UNITS	SCALAR VECTOR	EXAMPLE

1) FORCE

- Weight

2) Acceleration

- gravity

Delivery guy Weight of pizzas were  $209.79\text{ N}$  ↓ on the PLANET he arrived at. What planet got the pizzas?

①  $m = 18.9\text{ kg}$

$W = 209.79\text{ N} \downarrow$

$g = ?$

②  $W = mg \quad g = \frac{W}{m}$

③  $\frac{209.79\text{ N}}{18.9\text{ kg}} = \frac{(18.9\text{ kg})g}{18.9\text{ kg}}$

④  $g = 11.1\text{ m/s}^2 \downarrow$

⑤ SATURN