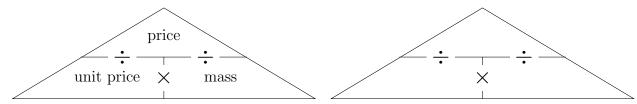
1. Here are two proportional formula triangles

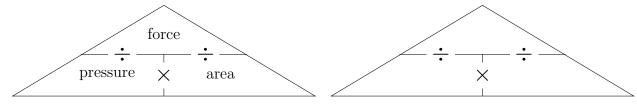


Calculate the price of a leg of lamb when

unit price = £12 per kg
$$mass = 2 \text{ kg}$$

£

2. Here are two proportional formula triangles



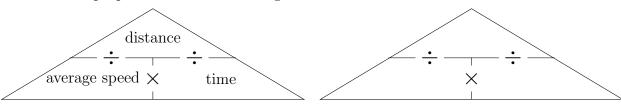
Calculate the force due to a gale on a wind break

$$area = 3 m^2$$

 $pressure = 250 N/m^2$

..... N

3. Here are two proportional formula triangles



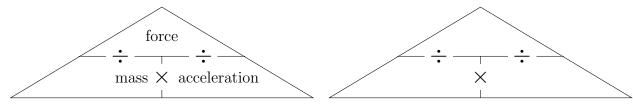
Calculate the distance travelled by a runner when

average speed =
$$4 \text{ m/s}$$

time = $1200 \text{ seconds} (20 \text{ minutes})$

m

4. Here are two proportional formula triangles



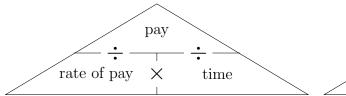
Calculate the force produced by a cheetah

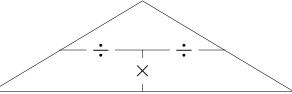
$$\begin{aligned} \text{mass} &= 2000 \text{ kg} \\ \text{acceleration} &= 3 \text{ m/s}^2 \end{aligned}$$

N

Turn over for more questions and answers

5. Here are two proportional formula triangles





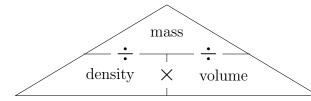
Calculate the M.P. Jeremy Hunt's pay when

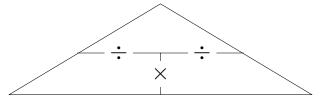
time worked = 4 hours

 $source:\ https://publications.parliament.uk/pa/cm/cmregmem/210920/210920.pdf$

£

6. Here are two proportional formula triangles





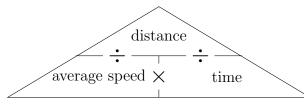
Calculate the mass of a tub of honey when

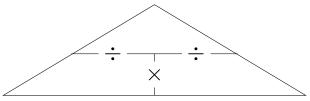
density =
$$1.42 \text{ g/cm}^3$$

$$volume = 1000 \text{ cm}^3$$

..... grams

7. Here are two proportional formula triangles





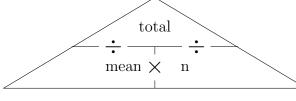
Calculate the distance travelled by a high speed train

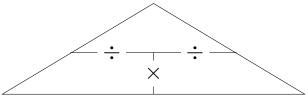
average speed
$$= 140 \text{ mph}$$

$$time = 2 hours$$

..... miles

8. Here are two proportional formula triangles





Calculate the total weight of 100 cherries when

mean weight
$$= 8 \text{ gram}$$

n, the number of cherries
$$= 100$$

..... gram

Answers Q1: £24, Q2: 750 N Q3: 4800 metres, Q4: 6000 N