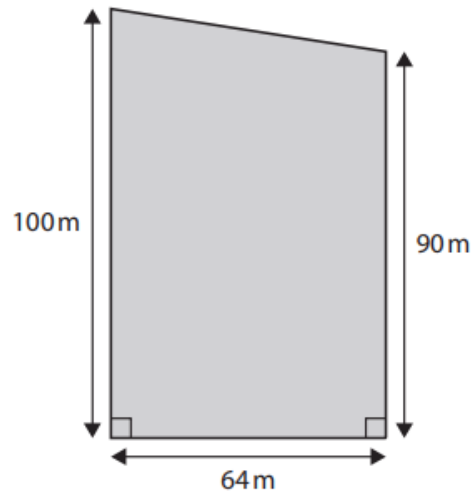


# You Are The Assessor | Level 2 maths

Chris Briggs  
Product Manager Post 16 English, Maths and Digital Skills

# How many marks would you award?

Jack is managing a concert.  
The diagram shows the total floor space for the concert.



Jack receives £21 for each square metre of floor space from ticket sales.

He donates  $\frac{1}{7}$  of the total he receives from ticket sales to a charity.

How much money does Jack donate to the charity?  
You **must** show your working.

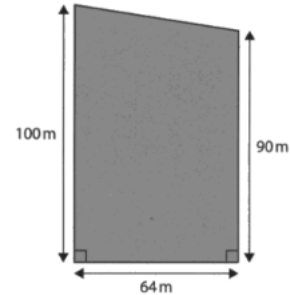
(6)

# How many marks would you award?

Question	Process	Mark	Mark Grid	Evidence
Q4	Process to find missing length	1	A	$100 - 90 (=10)$
	Begins process to work with area	1 or	B	e.g. $64 \times 100 (=6400)$ <b>OR</b> $\frac{1}{2} \times 64 \times '10' (=320)$ <b>OR</b> $64 \times 90 (=5760)$
	Full process to work out a total	2	BC	e.g. $'6400' - '320' (=6080)$ <b>OR</b> $'5760' + '320' (=6080)$ <b>OR</b> $'6400' \times 21 - '320' \times 21 (=127680)$ <b>OR</b> $'6400' \times 21 \div 7 - '320' \times 21 \div 7 (=18240)$
	Begins to work with donation	1 or	D	e.g. $\{\text{area}\} \times 21 (=127680)$ <b>OR</b> $21 \div 7 (=3)$ <b>OR</b> $\{\text{area}\} \div 7 (=868.5..)$
	Process to work out donation	2 or	DE	e.g. $\{\text{area}\} \times 21 \div 7 (=18240)$ <b>OR</b> $\{\text{area}\} \times '3' (=18240)$
	Accurate figure	3	DEF	18240  NB This question requires working shown
<b>Total marks for question</b>		<b>6</b>		

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How much money does Jack donate to the charity?  
You **must** show your working.

$R = 100 + 90 + 64 = 254$  (6)

$A = 64 \times 90 = 5760$

$A = 100 \times 90 \times 64 = 576000 \div 2$

$$\begin{array}{r} 64 \\ \times 90 \\ \hline 00 \\ 5760 \\ \hline 238000 \\ 2 \overline{) 576000} \end{array}$$

$$\begin{array}{r} 5760 \\ \times 21 \\ \hline 0000 \\ 115200 \\ \hline 115200 \end{array}$$

$$\begin{array}{r} 5760 \\ \times 21 \\ \hline 115200 \\ + 5760 \\ \hline 120960 \end{array}$$

$$\begin{array}{r} 115200 \\ + 5760 \\ \hline 120960 \end{array}$$

$$\begin{array}{r} 115200 \\ 2 \overline{) 120960} \\ \hline 115200 \\ \hline 5760 \end{array}$$

11

$\frac{1}{7}$  of 1208960

$$\begin{array}{r} 01870.8587 \\ 7 \overline{) 12089600000} \end{array}$$

£1870.85

£1870.85

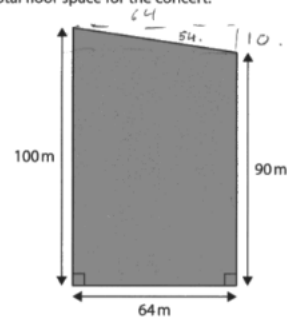
# How many marks would you award?

- This learner would get three marks for this answer.
- They have NOT shown the process to find the missing length.
- They have one mark for starting the process to find the area.
- They get two marks for the process to work out the donation.
- They do NOT get the accurate figure mark.

Question	Process	Mark	Mark Grid	Evidence
Q4	Process to find missing length	1	A	100 – 90 (=10)
	Begins process to work with area	1 or	B	e.g. $64 \times 100$ (=6400) <b>OR</b> $\frac{1}{2} \times 64 \times '10'$ (=320) <b>OR</b> $64 \times 90$ (=5760)
	Full process to work out a total	2	BC	e.g. ' $6400$ ' – ' $320$ ' (=6080) <b>OR</b> ' $5760$ ' + ' $320$ ' (=6080) <b>OR</b> ' $6400$ ' $\times$ 21 – ' $320$ ' $\times$ 21 (=127680) <b>OR</b> ' $6400$ ' $\times$ 21 $\div$ 7 – ' $320$ ' $\times$ 21 $\div$ 7 (=18240)
	Begins to work with donation	1 or	D	e.g. {area} $\times$ 21 (=127680) <b>OR</b> 21 $\div$ 7 (=3) <b>OR</b> {area} $\div$ 7 (=868.5..)
	Process to work out donation	2 or	DE	e.g. {area} $\times$ 21 $\div$ 7 (=18240) <b>OR</b> {area} $\times$ '3' (=18240)
	Accurate figure	3	DEF	18240  NB This question requires working shown
<b>Total marks for question</b>		<b>6</b>		

# How many marks would you award?

Jack is managing a concert.  
The diagram shows the total floor space for the concert.



Jack receives £21 for each square metre of floor space from ticket sales.

He donates  $\frac{1}{7}$  of the total he receives from ticket sales to a charity.

How much money does Jack donate to the charity?  
You **must** show your working.

$$64 - 10 = 54.$$

$$100 + 90 + 64 + 54 = 308$$

$$\begin{array}{r} 100 + \\ 90 + \\ 64 + \\ 54 + \\ \hline 308 \end{array}$$



(6)

£

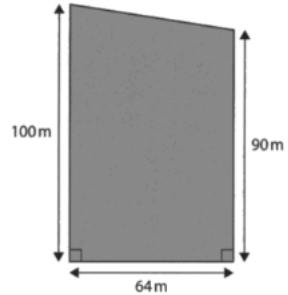
# How many marks would you award?

- This learner would get one mark for this answer.
- They have shown the process to find the missing length, so get that mark. This is shown on the diagram.

Question	Process	Mark	Mark Grid	Evidence
Q4	Process to find missing length	1	A	$100 - 90 (=10)$
	Begins process to work with area	1 or	B	e.g. $64 \times 100 (=6400)$ <b>OR</b> $\frac{1}{2} \times 64 \times '10' (=320)$ <b>OR</b> $64 \times 90 (=5760)$
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	Accurate figure	3	DEF	18240  NB This question requires working shown
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# How many marks would you award?

Jack is managing a concert.  
The diagram shows the total floor space for the concert.



Jack receives £21 for each square metre of floor space from ticket sales.

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How much money does Jack donate to the charity?  
You **must** show your working.

(6)

Area =  $64\text{m} \times 90\text{m} = 5760\text{m}^2$

$\frac{1}{7} \times 5760 = 851.3$

$5760 - 851.3 =$

$$\begin{array}{r} 90 \\ \times 64 \\ \hline 360 \\ 540 \\ \hline 5760 \end{array}$$

$$\begin{array}{r} 851.3 \\ \times 7 \\ \hline 5760 \end{array}$$

$\frac{1}{7} \times 5760 =$

$$\begin{array}{r} 90 \\ \times 64 \\ \hline 360 \\ 540 \\ \hline 5760 \end{array}$$

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$\frac{1}{7} \times 5760 =$

$$\begin{array}{r} 90 \\ \times 64 \\ \hline 360 \\ 540 \\ \hline 5760 \end{array}$$

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$\frac{1}{7} \times 5760 =$

$$\begin{array}{r} 90 \\ \times 64 \\ \hline 360 \\ 540 \\ \hline 5760 \end{array}$$

$$\begin{array}{r} 851.3 \\ \times 7 \\ \hline 5760 \end{array}$$

$$\begin{array}{r} 57 \\ 3.14 \\ 64 \\ \hline 7200 \end{array}$$

$4908.70$

$\cdot 21$

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$$\begin{array}{r} 4968.70 \\ 21 \\ \hline 490870 \\ 981640 \\ \hline 920720 \end{array}$$

$\frac{1}{4} \times 3.14 \times 64 \times 90 =$

£920.72



# How many marks would you award?

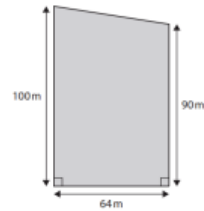
- This learner would get three marks for this answer.
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	Accurate figure	3	DEF	18240  NB This question requires working shown
<b>Total marks for question</b>		<b>6</b>		

# How many marks would you award?

2. Jack is managing a concert.

The diagram shows the total floor space for the concert.



Jack receives £21 for each square metre of floor space from ticket sales.

He donates  $\frac{1}{7}$  of the total he receives from ticket sales to a charity.

How much money does Jack donate to the charity? You must show your working.

a. What is the missing measurement of the triangle in the diagram?

b. What is the formula for the area of a triangle?

c. What is the area of the triangle?

d. What is the area of the rectangular part of the floor space?

e. How much money does Jack receive from ticket sales in total?

f. How much money does Jack donate to charity?