



## Solutions

1a.

Use of calculator or, $r = \frac{31512.5}{\sqrt{42587.5 \times 25187.5}}$	<b>M1</b>
= 0.962	<b>M1</b>

1b.

r is close to 1 therefore strong correlation	<b>M1</b>
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1c.

$b = \frac{31512.5}{42587.5}$	<b>M1</b>
= 0.7339957...	<b>M1</b>
= 0.740	<b>M1</b>

1d.

$a = 1326.25 - (0.7399 \times 2423.75) = -467.2$	<b>M1</b>
$m = -467 + 0.74v$	<b>M1</b>

1e.

b is the money (spent) per visitor.	<b>M1</b>
So each 1000 visitors generates an extra £0.74 million	<b>M1</b>





## Solutions

1a.

$S_{xy} = 23070 - \frac{477 \times 480}{12} = 3990$	<b>M1</b>
$r = \frac{3990}{\sqrt{5606.25 \times 4244}}$	<b>M1</b>
$r = 0.81799\dots$ $r = 0.818$	<b>M1</b>

1b.

0.818	<b>M1</b>
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1c.

Positive correlation	<b>M1</b>
So, there is support for the bank's claim	<b>M1</b>

