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8 Pavel asked 60 people at an airport where they came from. All of the 60 people came from Europe or Africa or Asia.

- 9 people came from Africa.
- 14 females came from Europe.
- 3 males came from Africa.
- 16 of the 29 males came from Asia.

Using this information, complete the two-way table.

	Europe	Africa	Asia	Total
Male				
Female				
Total				

(Total for Question 8 is 4 marks)



9 $c = 4$
 $d = 7$

(a) Work out the value of $3c + 2d$

.....
(2)

$p = -6$
 $m = -2$

(b) Work out the value of $2p^2 + 3m$

.....
(2)

There are 6 eggs in a small box of eggs.
There are 12 eggs in a large box of eggs.

Alex buys g small boxes of eggs and h large boxes of eggs.
He buys a total of T eggs.

(c) Write down a formula for T in terms of g and h .

.....
(3)

(Total for Question 9 is 7 marks)



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10 (a) Use your calculator to work out the value of $\frac{67.8 + 4.6^2}{\sqrt{56}}$

Write down all the figures on your calculator display.

.....
(2)

(b) Give your answer to part (a) correct to 2 significant figures.

.....
(1)

(Total for Question 10 is 3 marks)



11 A circle has radius 18 cm.

Work out the circumference of the circle.
Give your answer correct to 3 significant figures.

..... cm

(Total for Question 11 is 2 marks)

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12 Gavin bought 3 pairs of jeans in the USA.
He paid a **total** of \$72

Gavin sold the 3 pairs of jeans in England.
He sold each pair of jeans for £34.50

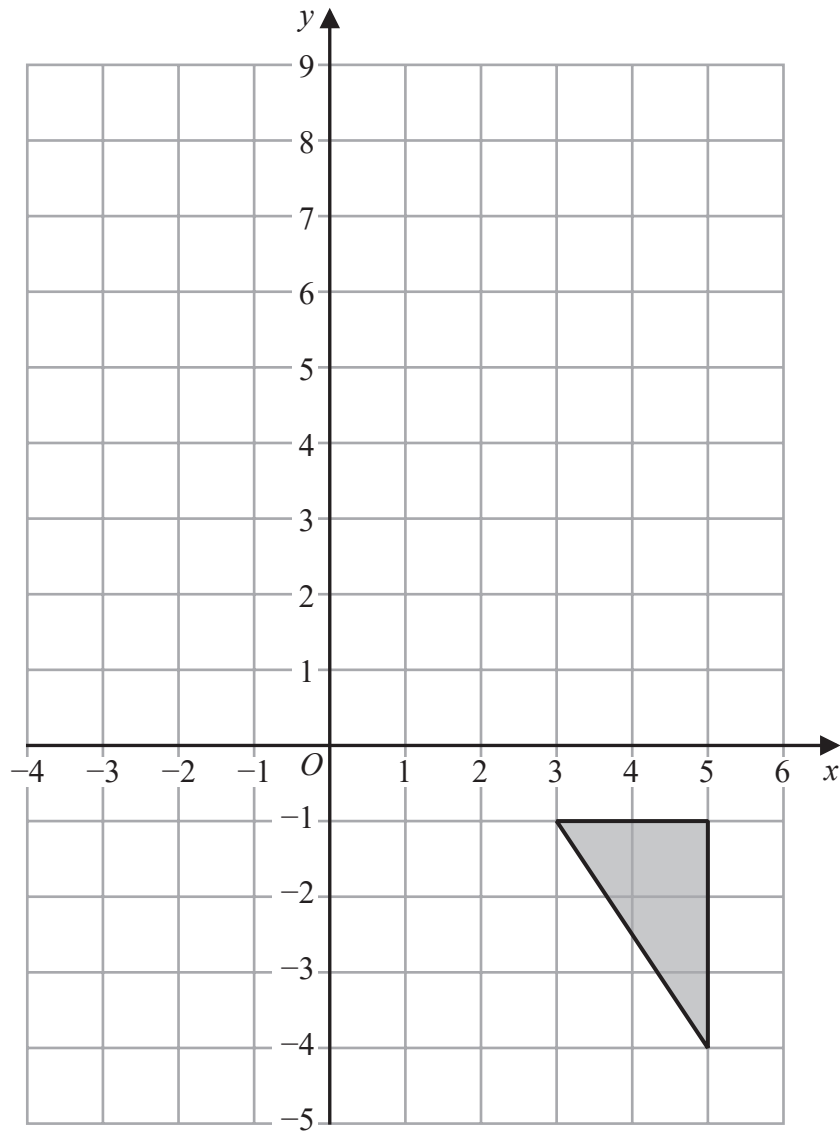
$$£1 = \$1.34$$

Work out Gavin's percentage profit.
Give your answer correct to the nearest whole number.

.....%

(Total for Question 12 is 4 marks)





(a) On the grid, reflect the shaded triangle in the line with equation $y = 2$

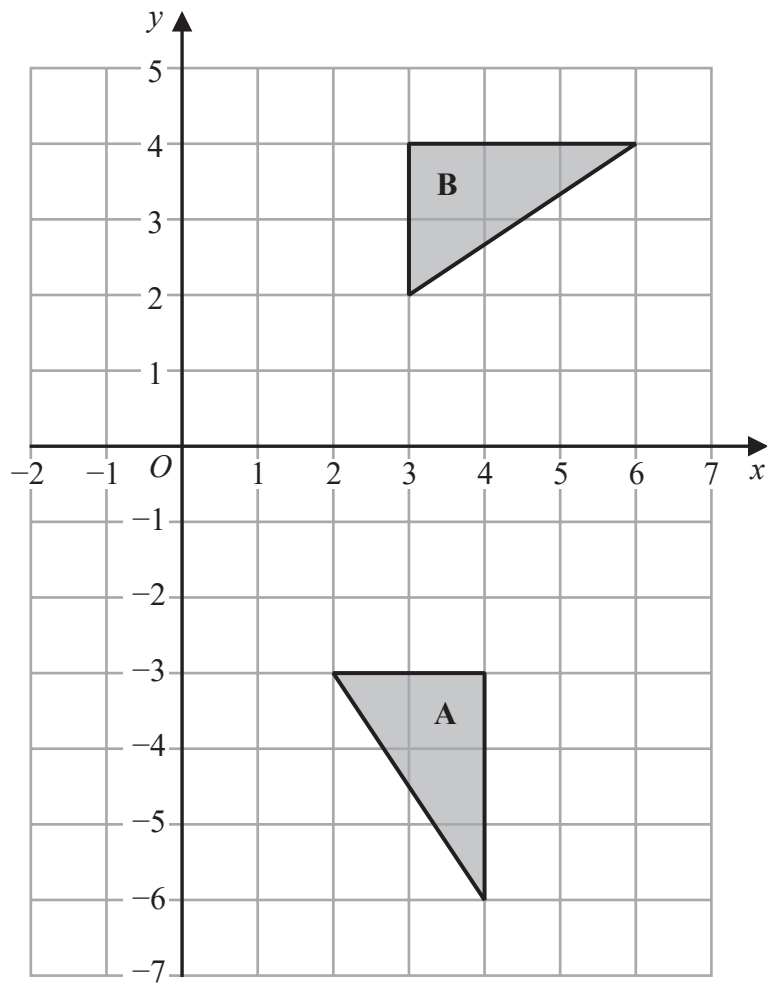
(2)

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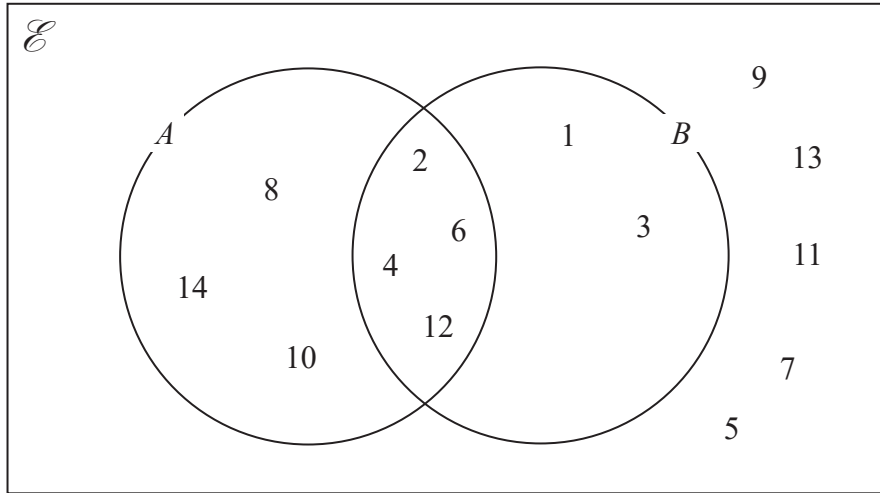
(b) Describe fully the single transformation that maps triangle A onto triangle B.

(3)

(Total for Question 13 is 5 marks)



14 The numbers from 1 to 14 are shown in the Venn diagram.



(a) List the members of the set $A \cap B$

.....
(1)

(b) List the members of the set B'

.....
(1)

A number is picked at random from the numbers in the Venn diagram.

(c) Find the probability that this number is in set A but is **not** in set B .

.....
(2)

(Total for Question 14 is 4 marks)

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