Mathematics 9+ Assessed Homework (November)

Non-Calculator

Name:

Initial reflection:

Assessor:

Feedback:

Response:

1. *(a)* (i) Write down, in words, the number 35 276.

....

(ii) Write down, in figures, the number sixteen thousand three hundred and forty.

....

[2]

(b) Using the following list of numbers

28   16   64   52   43   62   42   8

write down

(i) two numbers that add up to 90,

....

(ii) the number that is the difference between 67 and 24,

....

(iii) a multiple of 6,

....

(iv) the answer when 40 is divided by 5,

....

(v) the square of 8.

....

[5]

(c) Write down a factor of 24 which is between 7 and 11.

....

[1]

(d) Write 7682

(i) correct to the nearest 10,

....

(ii) correct to the nearest 1000.

....

[2]

(e) Write 14.6375 to two decimal places.

....

[1]

2. *(a)* Calculate 124×36.

....

....

....

....

....

....

[3]

(b) Calculate

(i) $\frac{2}{5}$ of 40,

....

....

....

[2]

(ii) 6% of 400.

....

....

....

....

[2]

3. *(a)* Write down the size of the angles marked *x*, *y* and *z* in the diagram.

x

62°

y

72°

z
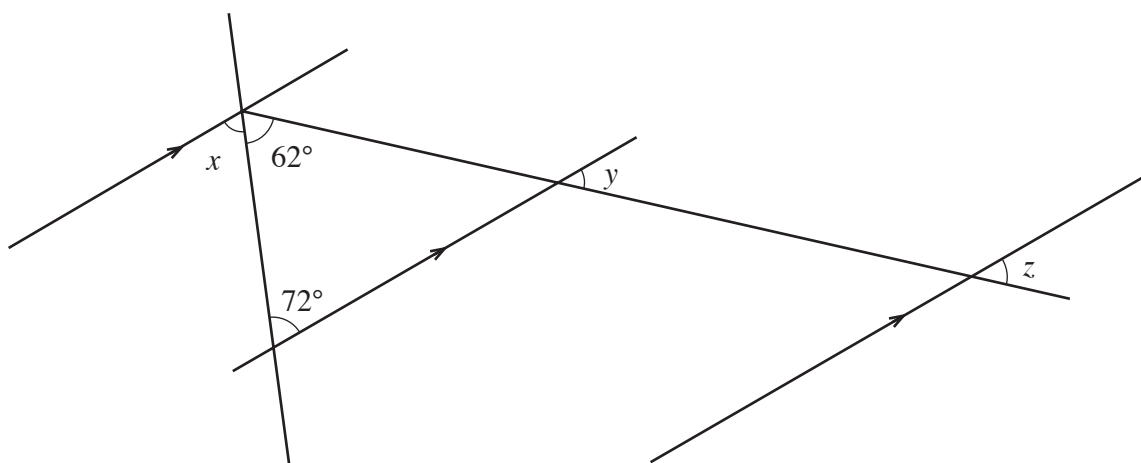
Diagram not drawn to scale.

$x = $ ....°

$y = $ ....°

$z = $ ....°

[3]

(b) The diagram shows a regular 8-sided polygon.

w
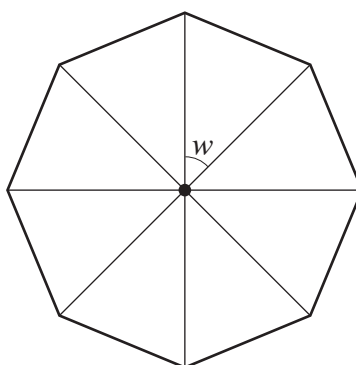
Diagram not drawn to scale.

Calculate the size of the angle marked *w* in the diagram.

....

....

....

[2]

(c) Find the size of the angle marked *z*.

$8z$

z
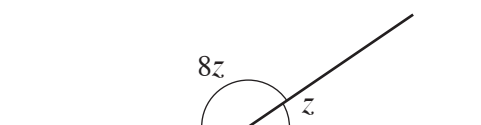
Diagram not drawn to scale.

$z = $ .... °   [2]

4. Express 480 as a product of prime numbers in index form.
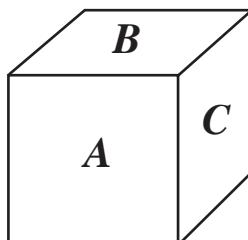
[3]

5. The faces of a biased dice are labelled *A, B, C D, E* and *F*.

The following table shows the probabilities of the biased dice landing with the top face showing either the letter *A* or *B* or *C* or *D* or *E* or *F*.

Letter	*A*	*B*	*C*	*D*	*E*	*F*
Probability	0·02	0·28	0·26	0·14	0·07	0·23

The dice is thrown once.
What is the probability that the dice lands with the top face showing either the letter *A* or the letter *F*?

....

....

[2]

6. A biased coin was tossed. The relative frequency of throwing a "Head" was calculated after a total of 50 throws, 100 throws, 150 throws, 200 throws and 250 throws. The results were plotted on the graph below.
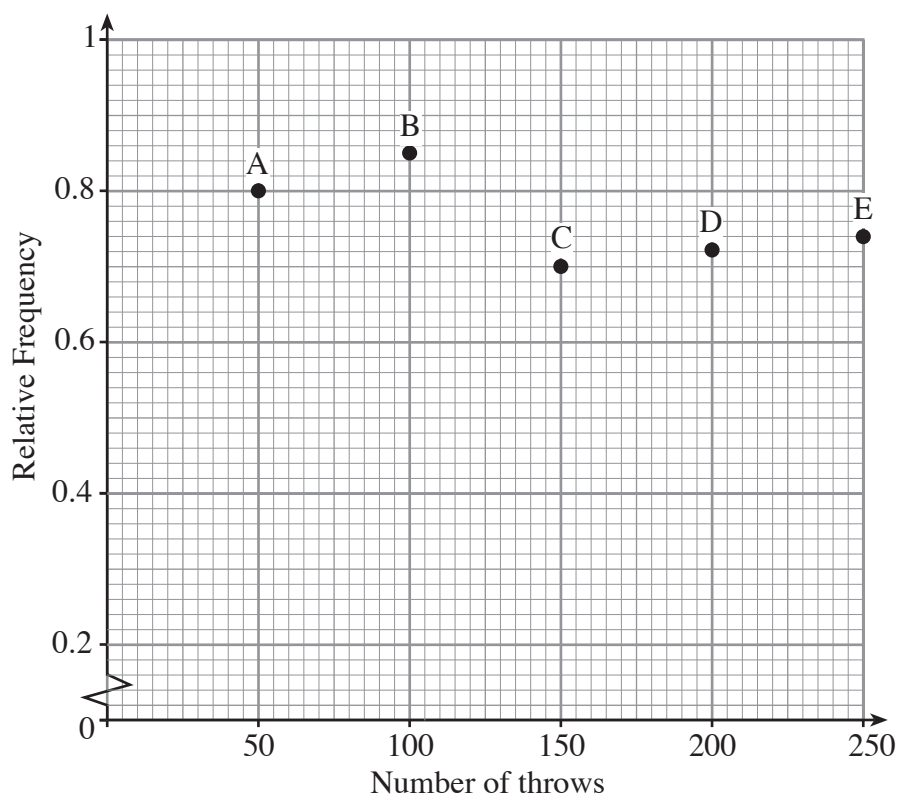
(a) Which **one** of the readings noted by the letters A, B, C, D and E on the graph is likely to give the best estimate of the probability of throwing a "Head" with this coin? **You must give a reason for your answer**.

....

....

....

....

....

....

[2]

(b) Using the graph,

    (i)   find how many "Heads" were obtained in the first 50 throws,

....
    [1]

    (ii)   find how many "Tails" were obtained in the first 100 throws.

....

....

....

....
    [2]