21. The original price of a duvet is £190 in a departmental store. The store decides to reduce all prices by 35%.

(a)   What is the price of the duvet in the sale?

(3)

(b)   The store decides to reduce prices by a further 10%. What is the price of the duvet now?
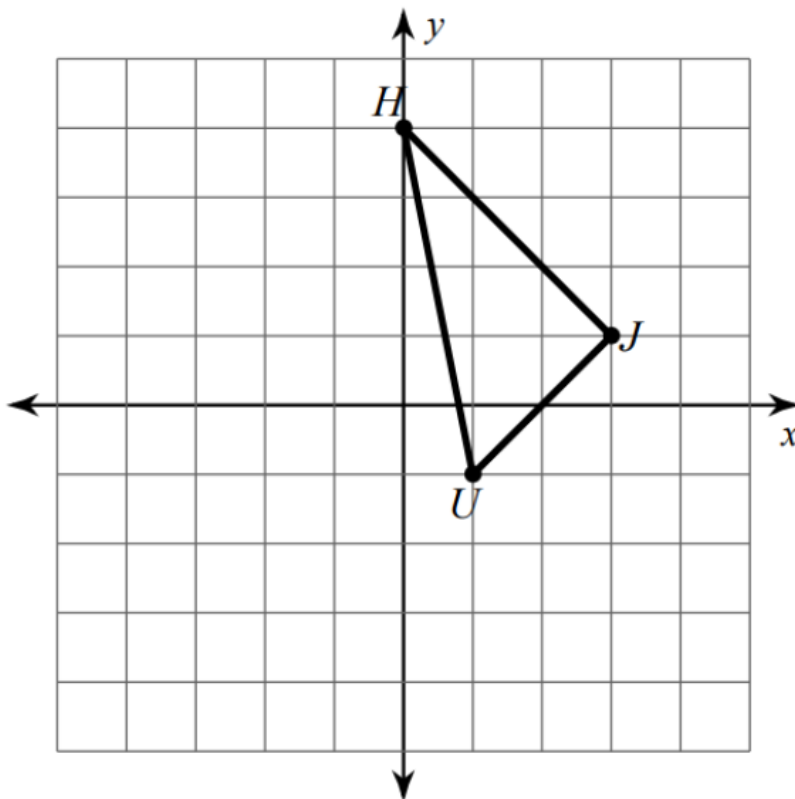
(2)

22. Simplify the following expressions:

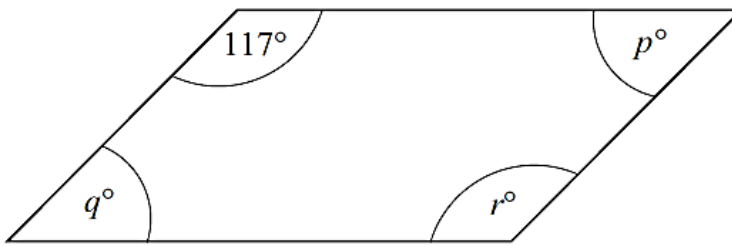(a) $4(2x - 3)$

(2)

(b) $3x^4 \times 9x^3$

(2)

(c) $27g^3 \div 3$

23. Translate 2 units down, 5 units left.

(2)

24. The diagram shows a parallelogram.

NOT TO SCALE
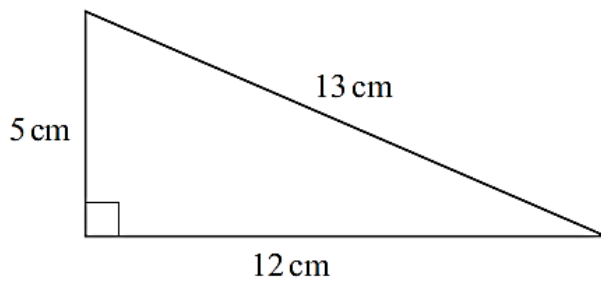
Find the values of p, q and r.

$p =$ ....

$q =$ ....

$r =$ ....

[2]

25. Here is a triangle.

NOT TO SCALE

Samira tries to calculate the area of this triangle.
Here is her working and answer.

$$5 \times 13 = 65$$
$$65 \div 2 = 32.5$$

Answer 32.5 cm

Describe two errors she has made.

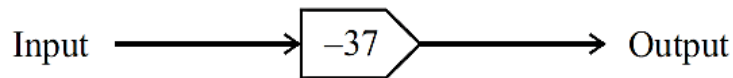Error 1 ....

Error 2 ....

[2]

26. Work out.

$$4 \div 10^2$$

.... [1]

27. Write 8% as a decimal.

.... [1]

28. Here is a function machine.

Input $\longrightarrow$ $\boxed{-37}$ $\longrightarrow$ Output

(a) Find the output when the input is 21

.... [1]

(b) Find the input when the output is −20

.... [1]
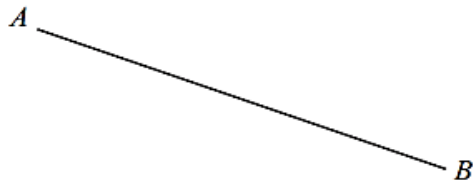
29. Draw a ring around **each** number that is a common factor of 30 and 75

5   15   25   75

[1]

30. Draw a line that is perpendicular to the line *AB*.

A

B

[1]

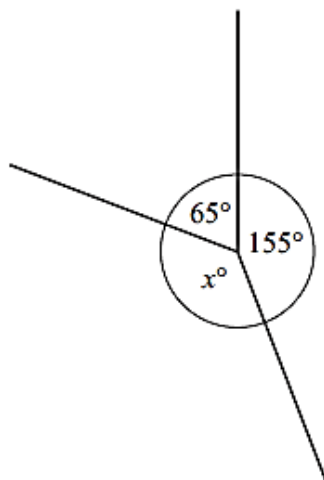Here are the first four terms in a sequence.

$$-22, \ -17, \ -12, \ -7, \ ...$$

31. Complete these sentences.

The next **two** terms in the sequence are .... and ....

The term-to-term rule for the sequence is ....

[2]

32. The diagram shows three lines meeting at a point.

NOT TO
SCALE

65°

155°

x°

Find the value of *x*.

x = ... [1]