



Writing and Expression Exam Practice

Q1. Chas has p pencils. Derek has 5 more pencils than Chas.
Write an expression for the number of pencils Derek has.

$$p+5$$

Answer: $p+5$
(1 mark)

Q2. Roy buys 5 packs of envelopes. Each pack contains e envelopes.
Write an expression for the number of envelopes Roy has.

$$5e$$

Answer: $5e$
(1 mark)



Q3. Jana is y years old, and she is 24 years younger than her mother.
Write an expression for her mother's age.

$$y+24$$

Answer: $y+24$
(1 mark)

Q4. Mark collects football stickers. Yesterday he had n stickers, but he lost 2 of them. Today, his friend gave him 5 more. Write an expression for how many stickers he currently has.

$$n-2+5$$

$$n+3$$

Answer: $n+3$
(1 mark)



Q5. Eric runs a taxi firm. He charges a £3 fixed charge, and then 50p per mile travelled. Write an expression for the cost, in £, for a customer who travels m miles.

$$3 + 0.5m$$

Answer: 3 + 0.5m
(2 marks)

Q6. A farm-shop sells boxes of pears and bags of apples. Each box contains p pears and each bag contains a apples. Rashid buys 8 boxes of pears and 3 bags of apples. Write down an expression for the total amount of fruit he has bought.

$$8p + 3a$$

Answer: 8p + 3a
(2 marks)



Q7. In an archery contest, players aim a circular target which has concentric circles painted on it. 6 points are awarded for hitting the white circle, 8 points are awarded for hitting the blue circle and 10 points for hitting the red circle. At the end of a contest, the white circle has been hit w times, the blue circle has been hit b times and the red circle has been hit r times.

Write an expression for the total amount of points scored in the contest.

$$6w + 8b + 10r$$

Answer: $6w + 8b + 10r$
(2 marks)

Q8. A flask contains 1 litre of juice. Tom drinks d ml of juice. His friend drinks twice as much as Tom. Write down an expression for the amount of juice in millimetres left in the flask.

$$1000 - d - 2d$$

$$1000 - 3d$$

Answer: $1000 - 3d$
(2 marks)



- Q9. A field contains f sun-flowers. Each sun-flower has p petals. During a flash flood, one-quarter of the flowers are washed away. Write down an expression for the number of petals which are left.

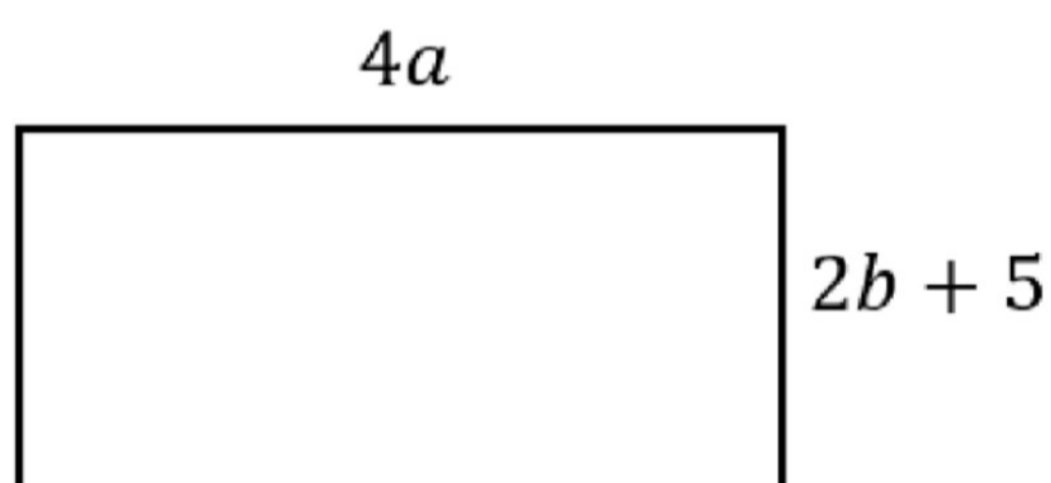
$$\frac{3}{4}f \text{ sun-flowers left}$$

$$\frac{3}{4}f \times p = \text{petals left}$$

$$\frac{3fp}{4}$$

Answer: $\frac{3fp}{4}$
(2 marks)

- Q10. Find and simplify an expression for the perimeter of the following rectangle:



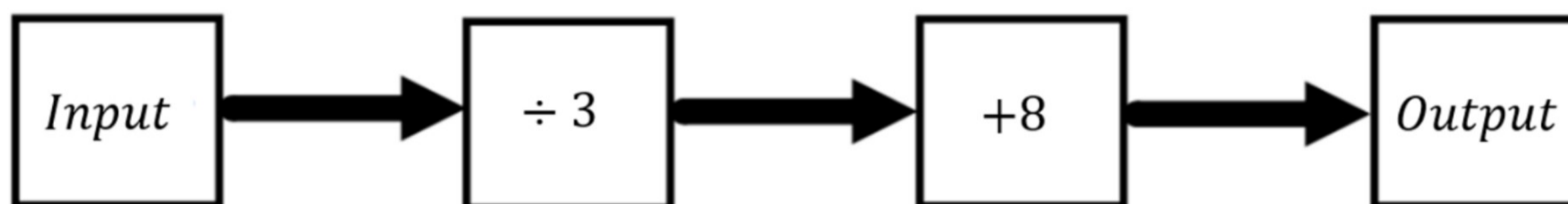
$$2(4a) + 2(2b + 5)$$

$$8a + 4b + 10$$

Answer: $8a + 4b + 10$
(3 marks)



Q11. Here is a number machine.



a) Work out an expression for the output if the input is t .

$$t \div 3 + 8$$

$$\frac{t}{3} + 8$$

Answer: $\frac{t}{3} + 8$
(1 mark)

b) Work out an expression for the input if the output is $3w + 10$.

$$(3w + 10 - 8) \times 3$$

$$(3w + 2) \times 3$$

$$9w + 6$$

Answer: $9w + 6$
(1 mark)



Q12. A box contains 100 packets of football stickers which mainly contain s stickers. w of the packets contain one extra bonus sticker.

Work out an expression for the total amount of stickers. Your answer should be simplified as far as possible.

$$\begin{array}{r} (100 - w)S \\ + \quad \underline{w(S+1)} \end{array} \quad \begin{array}{l} (\text{non-bonus stickers}) \\ (\text{bonus stickers}) \end{array}$$

$$\begin{aligned} \text{Total: } & 100S - wS + wS + w \\ & = 100S + w \end{aligned}$$

Answer: 100S + w
(3 marks)



Q13. Here is a menu in a café:

Tea:	85p
Coffee:	£1.70
Cola:	£1.10

Sally buys x teas, and y colas. She pays with a £10 note. Write down an expression for her change in pence.

$$1000 - (85x + 110y)$$

$$1000 - 85x - 110y$$

Answer: $1000 - 85x - 110y$
(3 marks)