

Master Maths 8 Worksheet 22

Simplifying Algebraic Expressions

22

Name: _____

1. Simplify the following algebraic expressions.

(a) $x + x + x + x + x$

(b) $a + b + a + b + b + b + a$

(c) $3m + 2m + 5m - 4m - m$

(d) $5k - 7k + 3k - 4k$

(e) $-6c + 9c$

(f) $3x + 5y - x + 4y - 5x - 2y$

(g) $-6a - 7b + 3a - 4b + 5b$

(h) $-5m + 4n - 2m - 6n + 7m + 2n$

2. The cost of pumpkin was p dollars per kilogram.

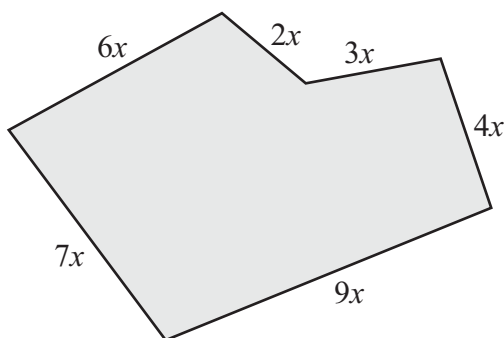
(a) Find the cost of pumpkins that weigh the following:

(i) 3 kilograms

(ii) 8 kilograms

(b) What would it cost to buy these two pumpkins?

3. Write an expression for the perimeter of this shape.



4. Simplify the following algebraic expressions.

(a) $3 \times 2 \times m$

(b) $a \times b$

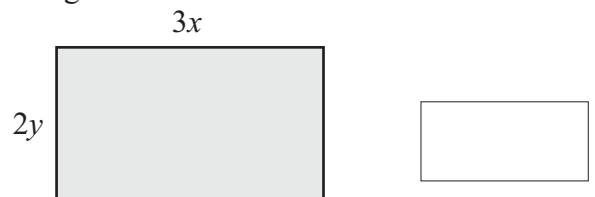
(c) $4 \times x \times 5 \times y$

(d) $6p \times 4q$

(e) $\frac{18m}{9}$

(f) $54d \div 9$

5. Write an expression for the area of this rectangle.



6. Sara is n years old. She is 5 years older than her sister Jodie and 3 years younger than her brother Brodie. Sara's mother is three times Sara's age.

Write expressions for their ages

Jodie

Brodie

Mother

Write an expression for the sum of all their ages (Sara, Jodie, Brodie and mother).

The sum of their ages is the same as Sara's grandmother who is 70 years old. How old is Sara?