

## Workout

Question 1: Simplify the following expressions.

- |                           |                           |                           |                           |
|---------------------------|---------------------------|---------------------------|---------------------------|
| (a) $3 \times y$          | (b) $w \times 3$          | (c) $7 \times x$          | (d) $a \times 4$          |
| (e) $a \times c$          | (f) $f \times g$          | (g) $h \times d$          | (h) $a \times y \times m$ |
| (i) $t \times t$          | (j) $p \times p$          | (k) $a \times a \times a$ | (l) $m \times m \times m$ |
| (m) $4 \times f \times g$ | (n) $3 \times w \times y$ | (o) $p \times 5 \times s$ | (p) $n \times c \times 7$ |
| (q) $t \times c \times w$ | (r) $y \times x \times w$ | (s) $5 \times a \times a$ | (t) $y \times 3 \times y$ |

Question 2: Simplify the following expressions.

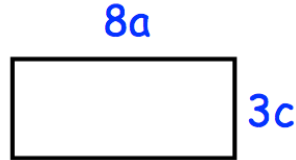
- |                              |  |                            |                            |
|------------------------------|--|----------------------------|----------------------------|
| (a) $5 \times 3w$            | (b) $4y \times 2$                      | (c) $3 \times 3m$          | (d) $10g \times 3$         |
| (e) $4 \times 2 \times y$    | (f) $3 \times 2 \times 2p$             | (g) $5 \times 2y \times 3$ | (h) $9a \times 2 \times 2$ |
| (i) $3a \times c$            | (j) $4y \times z$                      | (k) $5c \times b$          | (l) $c \times 6y$          |
| (m) $2a \times 3y$           | (n) $6c \times 3t$                     | (o) $9w \times 3a$         | (p) $2y \times 2g$         |
| (q) $2y \times y$            | (r) $5w \times w$                      | (s) $m \times 3m$          | (t) $x \times 2x$          |
| (u) $4t \times 2t$           | (v) $6y \times 3y$                     | (w) $9a \times 9a$         | (x) $12y \times 10y$       |
| (y) $2a \times 3p \times 5w$ | (z) $10y \times 2p \times 3c \times m$ |                            |                            |

Question 3: Simplify the following expressions

- |                          |                          |                        |                            |
|--------------------------|--------------------------|------------------------|----------------------------|
| (a) $a^2 \times a$       | (b) $y \times y^2$       | (c) $w^2 \times w^2$   | (d) $m^2 \times m^3$       |
| (e) $2t^2 \times t$      | (f) $4m \times m^2$      | (g) $g \times 2g^2$    | (h) $p^2 \times 3p^2$      |
| (i) $3p^2 \times 2p$     | (j) $2v^2 \times 7v^2$   | (k) $9p^2 \times 7p^2$ | (l) $5w^2 \times 2w^3$     |
| (m) $7a^3 \times 4a^3$   | (n) $6c^4 \times 5c^3$   | (o) $aw \times w$      | (p) $r \times ry$          |
| (q) $ay \times ay$       | (r) $c^2f \times f$      | (s) $dg \times d^2$    | (t) $3x^2y \times 2x$      |
| (u) $4ab \times 2ab$     | (v) $3m^2n^2 \times 4mn$ | (w) $2cd^2 \times d^2$ | (x) $4a^2bc^2 \times a^3b$ |
| (y) $2ad^2e \times a^3c$ | (z) $8m^2n \times 3no^5$ |                        |                            |

## Apply

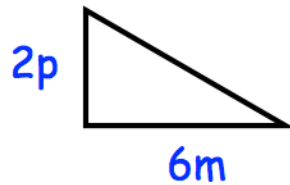
Question 1: Find an expression for the area of this rectangle



Question 2: Find an expression for the area of this rectangle

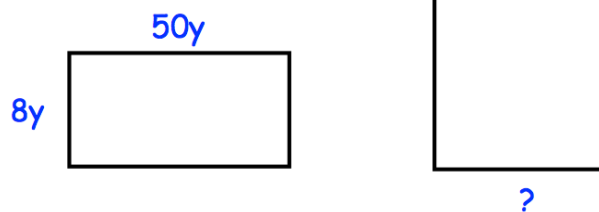


Question 3: Find an expression for the area of this triangle



Question 4: The area of the rectangle and square are equal.  
Find the side length of the square.

Not drawn to scale



Question 5: Find an expression for the area of this shape

