Simplify Expressions by Multiplying Terms

Maths

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Simplify Expressions by Multiplying Terms

1. • Simplify the expressions.

a) $2z \times 3$

b) $6 \times 7y$

c) $2w \times 0.5$

d) $9b \times 2b$

e) $2.7a \times 3a$

f) $6p \times 2p \times 3p$

g) $3d \times 5e$

h) $2y \times 3z \times y$

2. Fill in the missing values in the expressions.

a) $5y \times \boxed{} \equiv 15y$

b) $\boxed{} \times 7b \equiv 28ab$

c) $6.6p \times \boxed{} \equiv 3.3p$

3. Simplify the expressions.

a) $50q \div 10$

b) $14e \div e$

c) $16r^2 \div 2r$

d) $15f^3 \div 3f^2$

e) $64x^3 \div 4x$

Simplify Expressions by Multiplying Terms

4. Write 5 expressions that simplify to $8x^2y^3$
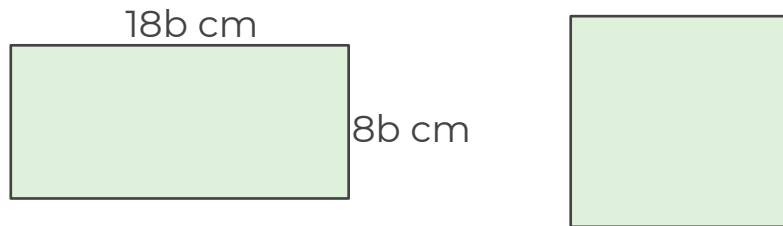
E.g. $2xy \times 4xy^2 \equiv 8x^2y^3$

5. Tyra is simplifying $9x \times 5x^2$
Her working out is shown below.

$$9x \times 5x^2 \equiv 9x \times 25x \equiv 225x^2$$

What mistake has she made?

6. The rectangle and square below have the same area.

18b cm

8b cm

Find the perimeter of the square.

Answers

Simplify Expressions by Multiplying Terms

1. Simplify the expressions.

a) $2z \times 3 \equiv 6z$

b) $6 \times 7y \equiv 42y$

c) $2w \times 0.5 \equiv w$

d) $9b \times 2b \equiv 18b^2$

e) $2.7a \times 3a \equiv 8.1a^2$

f) $6p \times 2p \times 3p \equiv 36p^3$

g) $3d \times 5e \equiv 15de$

h) $2y \times 3z \times y \equiv 6y^2z$

2. Fill in the missing values in the expressions.

a) $5y \times \boxed{3} \equiv 15y$

b) $\boxed{4a} \times 7b \equiv 28ab$

c) $6.6p \times \boxed{\dfrac{1}{2}} \equiv 3.3p$

3. Simplify the expressions.

a) $50q \div 10 \equiv 5q$

b) $14e \div e \equiv 14$

c) $16r^2 \div 2r \equiv 8r$

d) $15f^3 \div 3f^2 \equiv 5f$

e) $64x^3 \div 4x \equiv 16x^2$

Simplify Expressions by Multiplying Terms

4. Write 5 expressions that simplify to $8x^2y^3$

E.g. $2xy \times 4xy^2 \equiv 8x^2y^3$

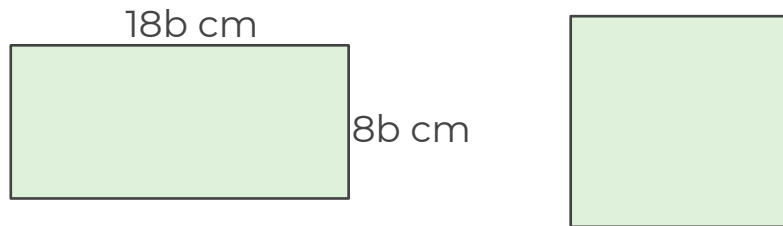5. Tyra says is simplifying $9x \times 5x^2$. Her working out is shown below.

$$9x \times 5x^2 \equiv 9x \times 25x \equiv 225x^2$$

What mistake has she made?

$5x^2$ isn't equivalent to $25x$.

The correct answer is $45x^3$.

6. The rectangle and square below have the same area.

18b cm

8b cm

Find the perimeter of the square.

48b cm