

Simplifying algebraic expressions

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Name: _____



Simplify the following expressions:

a) $3x + 5x$

e) $5c + 3c - c$

b) $9y - 2y$

f) $9a + 4a + a$

c) $8x - x$

g) $24a - 7a - a$

d) $5x + x + 2x$

h) $8x + x - 9x$

Simplify the following expressions:

i) $4x + 2y + 3y + x$

n) $9x - 3y + 4x - 6$

j) $5y + 3x + 2y + x$

o) $11a - 4b + 4a - 3b$

k) $7x + 6x + 3 + y$

p) $5s - 2t + 4 + 6t$

l) $9x + 3y + x - y$

q) $15 + 3y - 3x + x - 4$

Simplify the following expressions:

a) $3x \times 4y$

e) $5t \times 2t$

i) $2d \times 6c \times 3d$

b) $4a \times b$

f) $4a \times a^2$

j) $a \times 3a \times 6a$

c) $5x \times 3w$

g) $2a \times 5ab$

k) $2a \times 3b^2 \times 5a$

d) $8u \times 2v$

h) $3x \times 2xy$

l) $5a^2b^2 \times 4ab^3$

Simplify the following expressions:

m) $\frac{20a}{5}$

q) $\frac{30a^2}{6a}$

u) $\frac{8b}{16a}$

n) $\frac{20z}{5}$

r) $\frac{9ab^2}{3b}$

v) $\frac{22b}{33a^2}$

o) $\frac{8x^2}{2}$

s) $\frac{20t^3}{4t^2}$

w) $\frac{35a}{50a^2}$

p) $\frac{10a^4}{a^2}$

t) $\frac{12c}{18c}$

x) $\frac{16x}{24x^2}$

Exam style question:

The diagram shows an algebraic number pyramid.
Each brick is equal to the product of the two bricks below it.
Find the expressions for the missing bricks.

