

What is the value of $5x^3y^2$ when $x = 2$ and $y = 4$?

- a 240
- b 320
- c 480
- d 640

What value of m makes the equation

$$\frac{6a^m}{2a^3} = 3a^5 \text{ true?}$$

- a 2
- b 8
- c 15
- d 18

What is the value of $(x^2)^3$ when $x = \frac{1}{2}$?

- a $\frac{1}{4}$
- b $\frac{1}{12}$
- c $\frac{1}{32}$
- d $\frac{1}{64}$

What is the value of $6x^2$ when $x = \frac{1}{3}$?

- a $\frac{2}{9}$
- b $\frac{2}{3}$
- c 2
- d 4

What exponent goes in the box to make the following equation true?

$$\frac{x^{\square}x^6}{x^2} = x^{12}$$

- a 9
- b 8
- c 4
- d 3

The expression below can be simplified.

$$\frac{(x^2y)^3}{(xy)^2}$$

Which of the following shows the expression in its simplest form?

- a x^4y
- b x^4
- c xy
- d x^3y

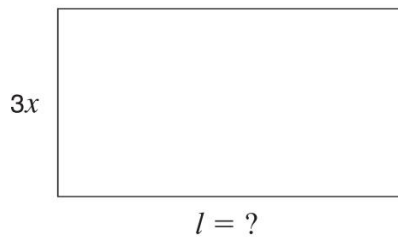
The sum of the perimeters of two shapes is represented by $13x + 4y$.

The perimeter of one shape is represented by $4x - 2y$.

Which expression represents the perimeter of the other shape?

- a $9x + 2y$
 - b $9x + 6y$
 - c $17x + 2y$
 - d $17x + 6y$
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The area of the rectangle shown below is $6xy^2$ square units.



Hint: $A = lw$

If the width is $3x$ units, which expression represents the length of the rectangle?

- a $2xy^2$ units
 - b $2y^2$ units
 - c $3xy^2$ units
 - d $3y^2$ units
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Consider the expression below.

$$3x^2(5x^2 - 2x + 1)$$

Which of the following is equivalent to this expression?

- a $8x^2 - 2x + 1$
- b $8x^2 + x + 4$
- c $15x^4 - 2x + 1$
- d $15x^4 - 6x^3 + 3x^2$

What is the value of the expression x^2

when $x = \frac{4}{5}$?

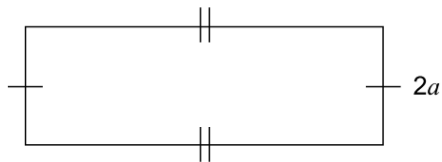
a $\frac{8}{5}$

b $\frac{8}{10}$

c $\frac{16}{5}$

d $\frac{16}{25}$

A rectangular field has a **perimeter** of $(10a - 6)$ metres and a width of $2a$ metres.



Which expression represents the **length** of this field?

A $8a - 6$

B $12a - 6$

C $3a - 3$

D $3a^2 - 3$

Which of the expressions below is equivalent to $3(4x - 5) - 7(9x - 2)$?

a $-51x - 1$

b $-51x - 3$

c $-51x - 7$

d $-51x - 29$