

Good morning "Early Morning Mathematicians"!

Please find your seat for the day.

Please take out:

- your whiteboard pen
- a pencil

Write down your homework and take out test corrections if you have them.

$$12 \times 15$$

180

$$12 \times 12 = 144$$

$$3 \times 12 = 36$$

$$\hline 180$$

Elle

$$12 \times 10 = 120$$

$$12 \times 5 = 60$$

$$120 + 60 = 180$$

Heaven

$$15 \times 3 = 45$$

$$45 \times 4 = 180$$

$$\left. \begin{array}{l} 15 \times 3 = 45 \\ 45 \times 4 = 180 \end{array} \right\} (15 \cdot 3)(4)$$

$$0.5 \times 16 \times \frac{3}{4}$$

6

$$0.5 = \frac{1}{2} = \div 2$$

$$\frac{16}{2} = 8$$

$$8 \times \frac{3}{4} = \frac{8}{1} \cdot \frac{3}{4}$$

$$\frac{8}{4} = 2$$

$$2 \times 3 = 6$$

$$\frac{8 \cdot 3}{1 \cdot 4}$$

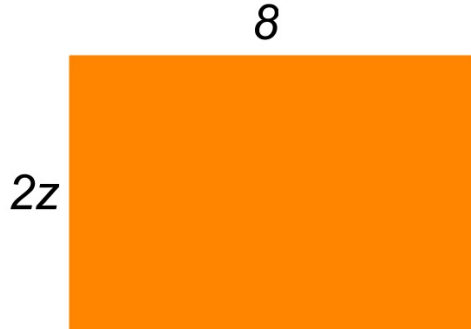
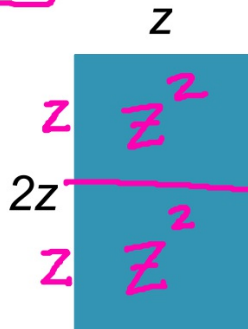
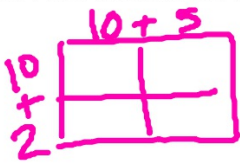
$$\frac{4 \cdot 4}{1} \cdot \frac{3}{4}$$

$$0.5 \cdot 12$$

6

$15 \times 12$

What mathematical questions can we ask about these figures?

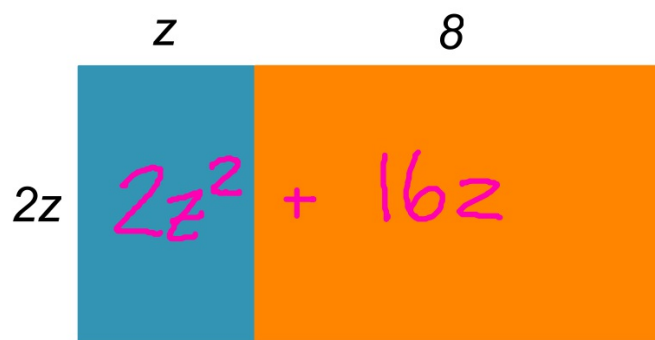


Value of  $z$   
area of 2nd  
figure  
perimeter

Blue:  $2z(z) = 2z^2$   
 $z \cdot z = z^2 \cdot 2$

Orange:  $2z(8) = 16z$

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Write an expression for the area of this figure.

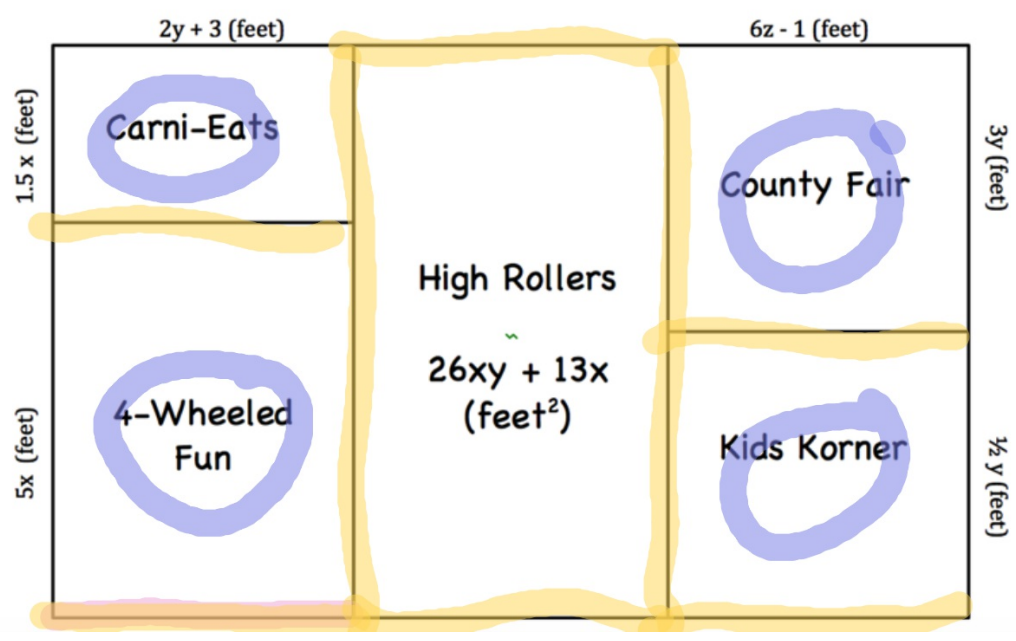
How do you know this expression is correct?

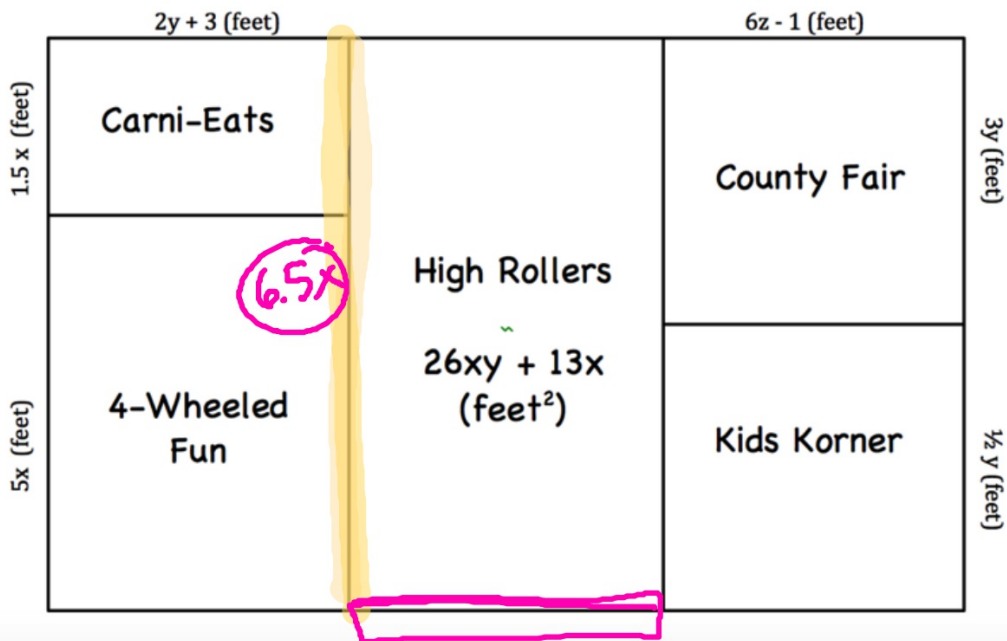
$3a^2 + 3a$  square units

The carnival is given a rectangular area to set up at the local rodeo. There will be sections for kids (called Kids Korner), traditional fair rides (called the County Fair), high rides (called High Rollers), car and truck rides (called 4-Wheeled Fun) and a food court (called Carni-eats).

The plan for the layout (in feet) is shown in the figure below. Use this figure; your knowledge of polynomials (variables and constants); the distributive property; and area to write an expression that best represents each of the missing areas or lengths in the diagram below.

You must be ready to convince me that each of your answers are correct.





$$\frac{26xy + 13x}{6.5x}$$



## Ticket Out the Door

List 3 possible lengths and widths possible if the area of this rectangle is:  $36xy - 12y \text{ cm}^2$ . Justify your responses.

