Determining the Relations

Use the online pattern blocks to answer the following questions.

1. How many ▲ are in □ ?

2. How many ▲ are in △ ?

3. How many △ are in □ ?

4. How many ▲ are in □ ?

5. How many □ are in □ ?

6. How many □ are in △ ?
Based on these relations,

7. If \( \boxed{\text{shape}} = 1 \), \( \boxed{\text{shape}} = ___ \).

8. If \( \boxed{\text{shape}} = 1 \), \( \boxed{\text{shape}} = ___ \).

9. If \( \boxed{\text{shape}} = 1 \), \( \boxed{\text{shape}} = ___ \).

10. If \( \boxed{\text{shape}} = 1 \), \( \boxed{\text{shape}} = ___ \).

Check your answers.
Awesome! Investigate the shapes online (If you have a JAVA-capable browser)

Let's do some really fun ones.

1. If \[ \text{hexagon} + \text{triangle} = 1, \] what is \[ \text{triangle} \]?

2. If \[ \text{hexagon} + \text{rectangle} = 1, \] what is \[ \text{triangle} + \text{triangle} \]?

3. If \[ \text{triangle} + \text{triangle} = 1, \] what is \[ \text{hexagon} + \text{rectangle} \]?

4. If \[ \text{hexagon} + \text{triangle} = 1, \] what is \[ \text{rectangle} \]?

5. If \[ \text{hexagon} - \text{triangle} = 1, \] what is \[ \text{triangle} + \text{rectangle} \]?

Check Your Answers

http://math.rice.edu/~lanius/Patterns/add.html
Draw a grid and figure out these fraction problems. Remember, these are challenging but fun. If you have a JAVA capable browser you can check your answers online.

1. If $\triangle + \blacksquare = \frac{2}{3}$, what is $\blacksquare$?

2. If $\blacktriangle + \blacktriangle = \frac{4}{5}$, what is $\blacktriangle$?

3. If $\blacksquare + \blacktriangledown = \frac{3}{4}$, what is $\blacksquare$?

4. If $\blacksquare + \blacktriangle = \frac{5}{8}$, what is $\blacktriangle$?

5. If $\blacktriangle + \blacktriangle - \blacksquare = \frac{1}{3}$, what is $\blacksquare$?

Check Your Answers