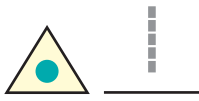


Combining Triangular Numbers

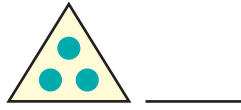
NCTM Standards 1, 2, 6, 7, 8, 9, 10

How many dots are in each triangle?

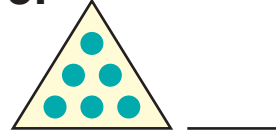
1.



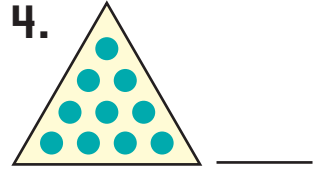
2.



3.

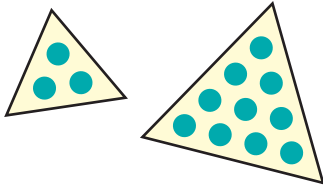


4.



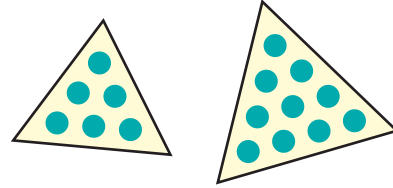
What is the fact family?

5.



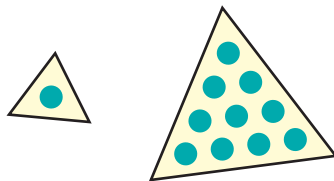
$$\begin{array}{r} 3 + 10 = 13 \\ \hline 10 + 3 = 13 \\ \hline 13 - 3 = 10 \\ \hline 13 - 10 = 3 \end{array}$$

6.



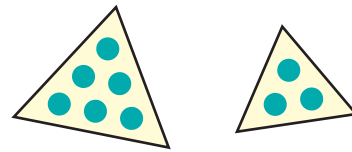
$$\begin{array}{r} + = \\ \hline + = \\ \hline - = \\ \hline - = \end{array}$$

7.



$$\begin{array}{r} + = \\ \hline + = \\ \hline - = \\ \hline - = \end{array}$$

8.



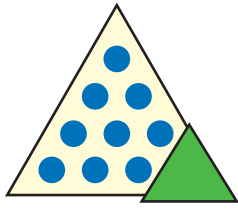
$$\begin{array}{r} + = \\ \hline + = \\ \hline - = \\ \hline - = \end{array}$$



NOTE: Your child is learning to combine triangular numbers such as 1, 3, 6, and 10. Ask your child to use two of these numbers to make a fact family.

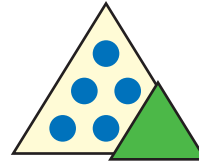
Write a number sentence.

9.



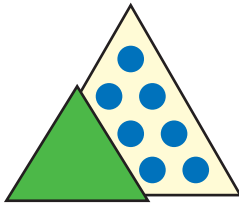
$$\boxed{10} - \boxed{1} = \boxed{9}$$

10.



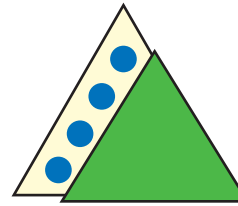
$$\boxed{} - \boxed{} = \boxed{}$$

11.



$$\boxed{} - \boxed{} = \boxed{}$$

12.



$$\boxed{} - \boxed{} = \boxed{}$$

Challenge

13. What is the next triangular number? 1, 3, 6, 10, 15, 21, _____

14. Complete the number sentences with triangular numbers. Use + or -.

$$16 = \underline{\hspace{2cm}}$$

$$16 = \underline{\hspace{2cm}}$$