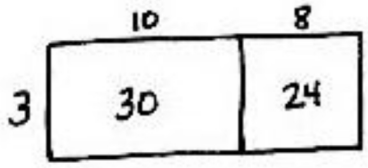
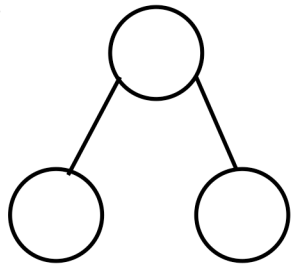
Name _____ Date _____

1. Maria solved the following division problem by drawing an area model.
   a. Look at the area model. What division problem did Maria solve?



   b. Show a number bond to represent Maria's area model. Start with the total and then show how the total is split into two parts. Below the two parts, represent the total length using the distributive property and then solve.



(___÷___) + (___÷___)

= ____ + ____

= _____

2. Solve 42 ÷ 3 using an area model. Draw a number bond and use the distributive property to solve for the unknown length.

3. Solve 60 ÷ 4 using an area model. Draw a number bond to show how you partitioned the area, and represent the division with a written method.

4. Solve 72 ÷ 4 using an area model. Explain, using words, pictures, or numbers, the connection of the distributive property to the area model.

5. Solve 96 ÷ 6 using an area model and the standard algorithm.

Answer Key

1. a. $54 \div 3 = 18$
   b. Whole: 54; parts: 30 and 24; 30, 3, 24, 3, 10, 8, 18
2. 14; whole: 42; parts: 30 and 12; $(30 \div 3) + (12 \div 3) = 10 + 4 = 14$; area model and number bond drawn
3. 15; whole: 60; part: 40; part: 20; area model and number bond drawn; solved with distributive property or standard algorithm
4. 18; solved with area model; explanations may vary.
5. 16; solved with area model and standard algorithm