Grade 4 Division Test

Write two multiplication sentences for each model then relate to two division sentences:

1.) 
   _____ X _____ = _____  _____ + _____ = _____
   _____ X _____ = _____  _____ + _____ = _____

2.) 
   _____ X _____ = _____  _____ + _____ = _____
   _____ X _____ = _____  _____ + _____ = _____

3.) 
   _____ X _____ = _____  _____ + _____ = _____
   _____ X _____ = _____  _____ + _____ = _____

4.) 
   _____ sets of _____ = _____
   _____ + _____ + _____ = _____
   _____ x _____ = _____
   _____ ÷ _____ = _____

5.) 
   _____ sets of _____ = _____
   _____ + _____ + _____ + _____ + _____ = _____
   _____ x _____ = _____
   _____ ÷ _____ = _____
6. \(20 \div 5 = \) is the same as \( \square \times 5 = 20 \) Answer and explain using a model and words.

7. Show how to skip count backwards by 4s from 36 to 0. Use the number line. (show your work)

   b) How many 4s did you count?
   c) \(36 \div 4 = \)

8. What division does each number line show?
   a) \( \underline{35} \div \underline{\square} = \underline{\square} \)
   b) \( \underline{\square} \div \underline{\square} = \underline{\square} \)

9. Show each division on a number line. Write the quotient.
   a) \(40 \div 4 = \)
   b) \(40 \div 8 = \)
10) Use the multiplication sentence to calculate the quotient.
   a) $3 \times 7 = 21$, so $21 \div 7 = \underline{\hspace{2cm}}$
   b) $8 \times 9 = 72$, so $72 \div 8 = \underline{\hspace{2cm}}$
   c) $6 \times 5 = 30$, so $30 \div 5 = \underline{\hspace{2cm}}$
   d) $5 \times 7 = 35$, so $35 \div 5 = \underline{\hspace{2cm}}$

11). Calculate, then write a related division sentence.
   a) $4 \times 3 = \underline{\hspace{2cm}}$
   b) $2 \times 9 = \underline{\hspace{2cm}}$
   c) $6 \times 7 = \underline{\hspace{2cm}}$
   d) $1 \times 10 = \underline{\hspace{2cm}}$
   e) $9 \times 7 = \underline{\hspace{2cm}}$

12). Create a division sentence from the picture, solve and include the remainder:
   a). \[ \begin{array}{ccc}
   & & \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \\
   & \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \\
   \end{array} \]
   \[35 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} R\]
   b). \[ \begin{array}{ccc}
   & \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \\
   \end{array} \]
   \[13 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} R\]
   c). \[ \begin{array}{ccc}
   \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \\
   & \bullet \bullet \bullet \bullet \bullet \\
   \end{array} \]
   \[\underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}} R\]
d) draw a model using symbols to show this division sentence:

\[ 5 \div 2 = 5 \text{ R } 3 \]

\[ 2 \]

e) \[ 7 \div 40 = 5 \text{ R } 5 \]

13. Oswald is making paper airplanes with 3 decals on each plane.
   a) If he has 29 decals, how many airplanes can he make?
   b) How many decals will he have left over? (or remaining)

14. There are 7 racers in each boat. If there are 63 rowers in the race, how many boats are there? (Write complete division sentence and answer).

15. You can use division to share. For example, 20 books can be shared among 5 groups. \( 20 \div 5 = 4 \), so there are 4 books in each group.
   a) 32 students need to be divided into 8 groups. Draw how many students will be in each group?
   b) Create a division sentence from question a.
   c) Use reverse operation multiplication to check your answer.

Bonus: Cory cut a piece of string into 3 equal parts. Then he cut each string into another 3 equal parts, so each was 2 cm long. How much did Cory start with?