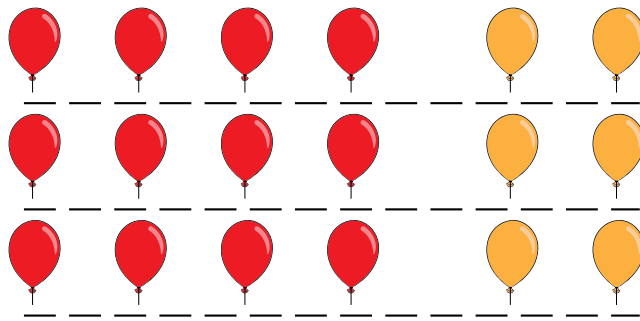


Worksheet: Distributive Property of Division



Q1: Write the addition expression that is missing:

$$\begin{aligned} 18 \div 3 &= (12 \div 3) + (6 \div 3) \\ &= \underline{\quad} + \underline{\quad} \\ &= 6. \end{aligned}$$



- A 3 + 2
- B 4 + 3
- C 3 + 3
- D 4 + 2

Q2: Olivia is learning to divide by using the distributive property.
Which expression is missing?

$$\begin{aligned} 27 \div 3 &= (\text{ ? }) + (9 \div 3) \\ &= 6 + 3 \\ &= 9. \end{aligned}$$

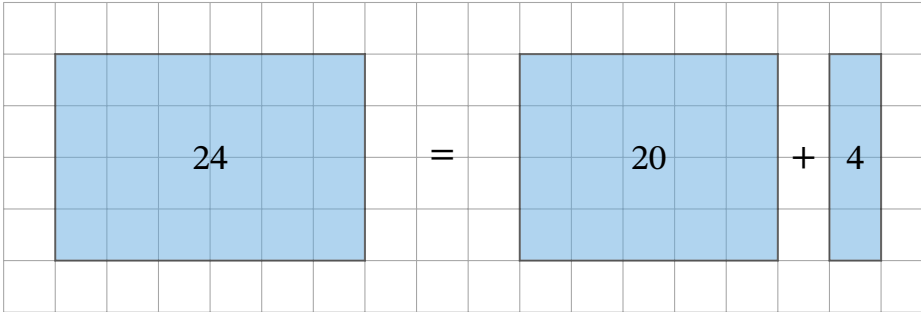
A $12 \div 3$

B $18 \div 3$

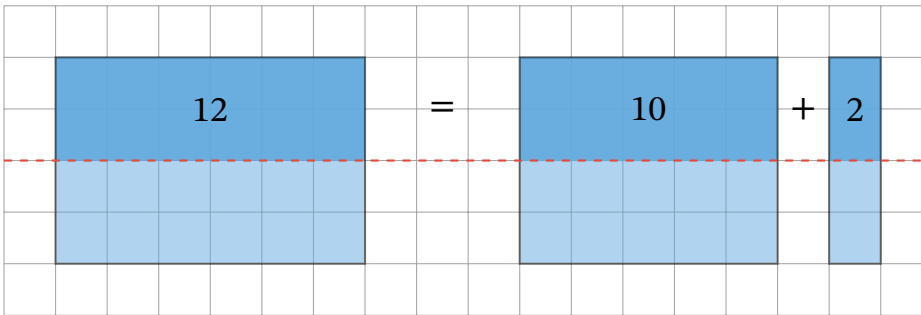
C $18 \div 2$

D $12 \div 2$

Q3: Liam and Isabella both had 24 squares.
Isabella made a group of 20 and a group of 4.



They divided their groups in half and still had the same amount of squares.



► What number is missing?

$$24 \div 2 = (\underline{\quad} \div 2) + (4 \div 2).$$

- A 10
- B 28
- C 20
- D 2

► Pick the equation that matches what they did.

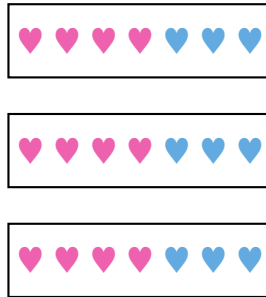
A $24 \div 2 = 14 + 2$

B $24 \div 2 = 1 + 2$

C $24 \div 2 = 10 + 2$

D $24 \div 2 = 5 + 7$

Q4: Liam is learning strategies to divide.



He finds that $21 \div 3 = (12 \div 3) + (__ \div 3)$.

► What number is missing from his equation?

A 4

B 9

C 7

D 3

► Use his equation to write the missing addition expression: $21 \div 3 = \underline{\quad} + \underline{\quad}$.

A 12, 9

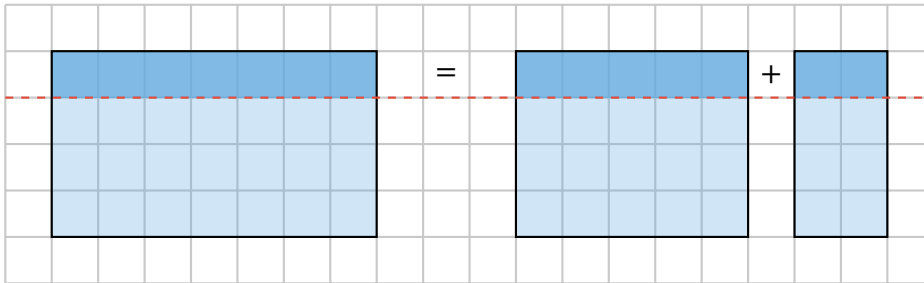
B 4, 3

C 12, 4

D 4, 1

Q5: Fill in the blanks with the missing addition expression:

$$\begin{aligned} 28 \div 4 &= (20 \div 4) + (8 \div 4) \\ &= \underline{\quad} + \underline{\quad} \\ &= 7. \end{aligned}$$



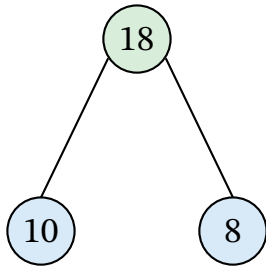
A $3 + 4$

B $5 + 4$

C $3 + 2$

D $5 + 2$

Q6: Michael solved $18 \div 2$ by writing it as the sum of simpler quotients.

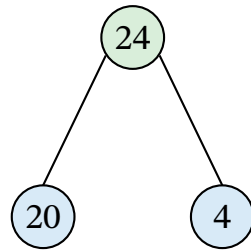


$$\begin{aligned} 18 \div 2 &= (10 \div 2) + (8 \div 2). \\ &= 5 + 4 \\ &= 9. \end{aligned}$$

Use this method to find the answers to these problems.

► Find the final answer.

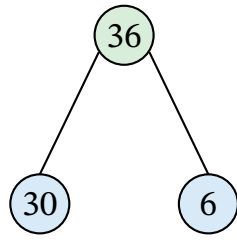
$$24 \div 2 = ?$$



- A 22
- B 12
- C 6
- D 14

► Find the addition expression.

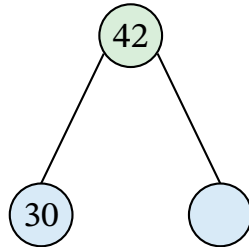
$$36 \div 3 = ? + ?$$



- A 10 + 3
- B 10 + 2
- C 1 + 3
- D 1 + 2

► Find the final answer.

$$42 \div 3 = ?$$



- A 23
- B 14
- C 16
- D 13

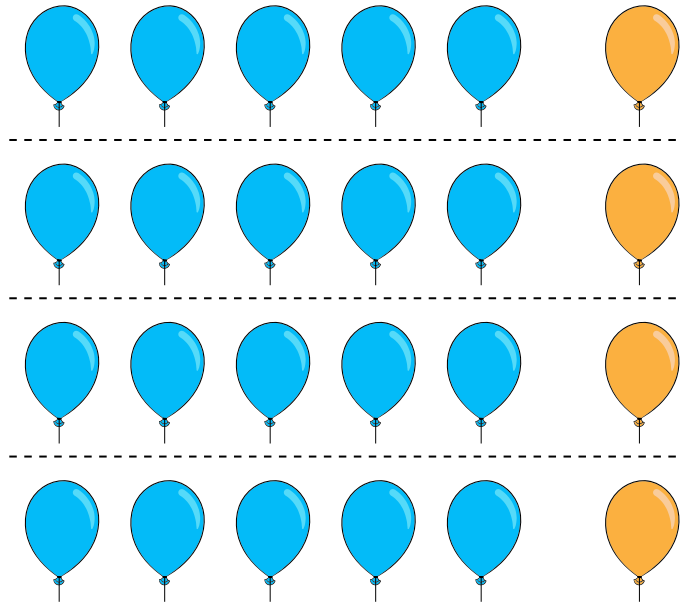
Q7: Daniel is using this model to help him divide by splitting 24.

Which expression has been covered?

$$24 \div 4 = (?) + (4 \div 4)$$

$$= 5 + 1$$

$$= 6.$$



A $20 \div 4$

B $10 \div 2$

C $10 \div 4$

D $20 \div 2$

Q8: Ethan has solved $15 \div 3$ by first writing it as the sum of simpler quotients.

$$\begin{aligned} 15 \div 3 &= (9 \div 3) + (6 \div 3) \\ &= 3 + 2 \\ &= 5. \end{aligned}$$

Use this strategy to answer the questions.

► Find the missing number.

$$\begin{aligned} 28 \div 4 &= ? + 2. \\ &\begin{array}{l} \swarrow \quad \searrow \\ 20 \quad 8 \end{array} \end{aligned}$$

- A 7
- B 3
- C 4
- D 5

► Find the missing number.

$$16 \div 2 = (? \div 2) + (4 \div 2).$$

- A 10
- B 14
- C 8
- D 12

► Write the missing sum.

$$18 \div 3 = ? + ?$$

12 6

- A $3 + 3$
- B $4 + 3$
- C $3 + 2$
- D $4 + 2$

Q9: Fill in the blanks:

$$\begin{aligned} 32 \div 4 &= (20 \div 4) + (12 \div 4) \\ &= _ + _ \\ &= 8. \end{aligned}$$

- A 5 + 3
- B 5 + 4
- C 4 + 4
- D 4 + 3

Q10: Mason spilled ink over his division homework.

$$\begin{aligned} 42 \div 3 &= (30 \div 3) + (\text{ink} \div 3) \\ &= 10 + \text{ink} \\ &= \text{ink} \end{aligned}$$

What number is the arrow pointing at?

- A 4
- B 14
- C 1
- D 12

Q11: Is $a(b \div c) = ab \div ac$?

A yes

B no



Question Video

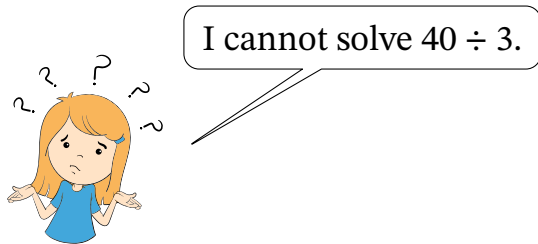
Q12: Elizabeth's teacher is talking about division.

$$\begin{array}{l} \begin{array}{c} \textcircled{33} \\ \diagdown \quad \diagup \\ \textcircled{30} \quad \textcircled{3} \end{array} \div 3 = (\textcircled{30} \div 3) + (\textcircled{3} \div 3) \\ = 10 + 1 \\ = 11. \end{array}$$

To solve $33 \div 3$, she breaks apart 33 into $30 + 3$.

- Elizabeth tried to solve $42 \div 3$ by breaking apart 42 into $40 + 2$.

$$\begin{array}{c} \textcircled{42} \\ \swarrow \quad \searrow \\ \textcircled{40} \quad \textcircled{2} \end{array} \div 3 = (\textcircled{40} \div 3) + (\textcircled{2} \div 3).$$



She got stuck. What is the problem?

- A 2 is too small; she does not know enough division facts about it.
- B 40 is too big; she does not know enough division facts about it.
- C 40 and 2 are not multiples of 3.
- D 40 and 2 are multiples of 3.

- How could she split 42?

- A $32 + 10$
- B $20 + 22$
- C $30 + 12$
- D $29 + 13$

► What is $42 \div 3$?

A 13

B 23

C 14

D 19