

Homework/Extension

Step 6: Divide by 4

National Curriculum Objectives:

Mathematics Year 3: (3C6) [Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables](#)

Mathematics Year 3: (3C7) [Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods](#)

Mathematics Year 3: (3C8) [Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which \$n\$ objects are connect to \$m\$ objects](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Match representations to calculations that divide by 4 through sharing and grouping to 12×4 . All questions have pictorial support.

Expected Match representations to calculations that divide by 4 through sharing and grouping to 12×4 . Scaffolding provided for each question with some pictorial support.

Greater Depth to Create representations to match the calculations that divide by 4 through sharing and grouping to 12×4 .

Questions 2, 5 and 8 (Varied Fluency)

Developing Complete comparison statements using symbols by dividing by 4 through sharing and grouping to 12×4 . All questions have pictorial support.

Expected Complete comparison statements using symbols by dividing by 4 through sharing and grouping to 12×4 . Scaffolding provided for each question with some pictorial support.

Greater Depth to Complete comparison statements using symbols by dividing by 4 through sharing and grouping to 12×4 .

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Explain which statement is correct when dividing by 4 through sharing and grouping to 12×4 . Pictorial support provided.

Expected Explain which statement is correct when dividing by 4 through sharing and grouping to 12×4 .

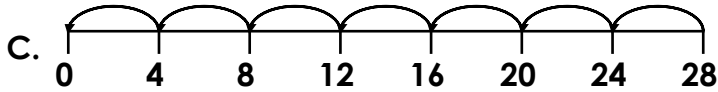
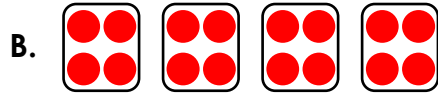
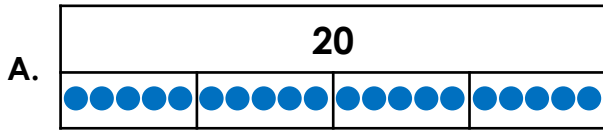
Greater Depth Explain which statement is correct and draw representations to support answers when dividing by 4 through sharing and grouping to 12×4 .

More [Year 3 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Divide by 4

1. Match the representations to the calculations.



D. $28 \div 4 = 7$

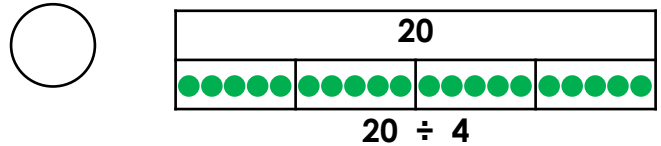
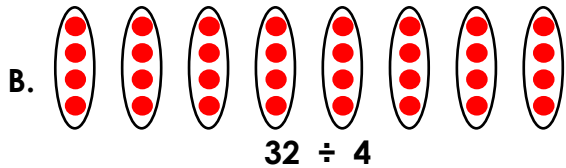
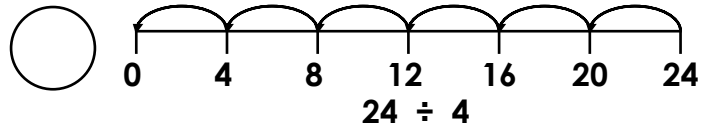
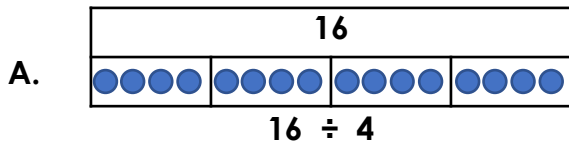
E. $20 \div 4 = 5$

F. $16 \div 4 = 4$



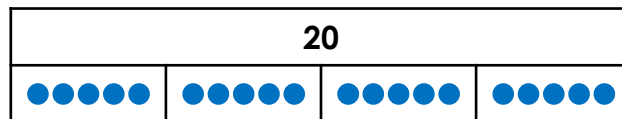
VF
HW/Ext

2. Complete the statements using $>$ $<$ or $=$.



VF
HW/Ext

3. Sameena and Josh are discussing a calculation.



This bar model shows that dividing 20 by 4 is equal to 4.



Sameena



Josh

This bar model shows that dividing 20 by 4 is equal to 5.

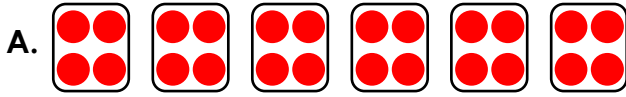
Who is correct? Explain your answer.



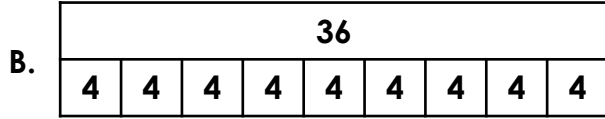
RPS
HW/Ext

Divide by 4

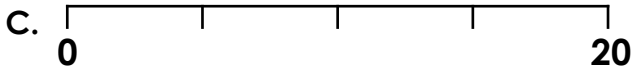
4. Match the representations to the calculations and complete the calculations.



D. $36 \div 4 =$



E. $20 \div 4 =$

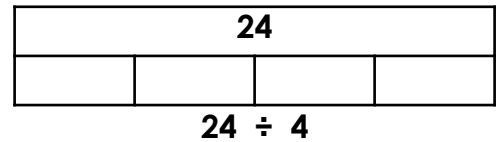
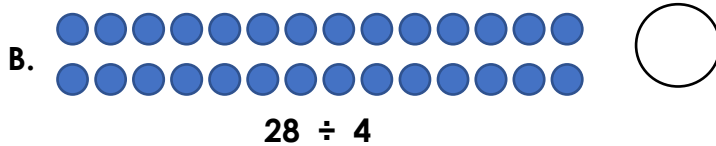
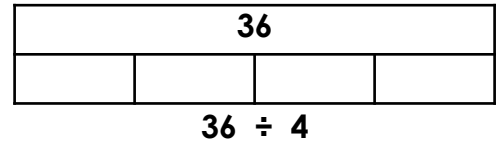
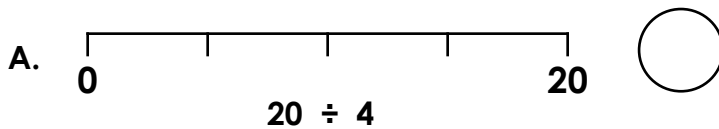


F. $24 \div 4 =$



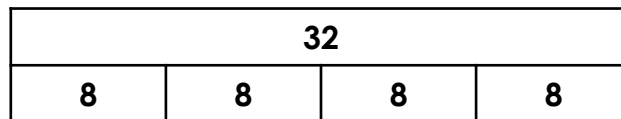
VF
HW/Ext

5. Complete the statements using $>$ $<$ or $=$.



VF
HW/Ext

6. Helena and Jamie are discussing a calculation.



This bar model shows that sharing 32 into 4 groups is equal to 8.



Helena



Jamie

This bar model shows that dividing 32 by 8 is equal to 8.

Who is correct? Explain your answer.

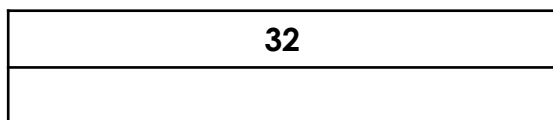


RPS
HW/Ext

Divide by 4

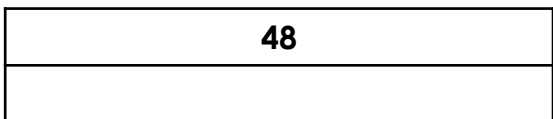
7. Complete each pictorial representation and the corresponding calculation.

A.



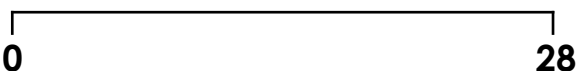
$$32 \div 4 =$$

B.



$$48 \div 4 =$$

C.



$$28 \div 4 =$$



VF
HW/Ext

8. Complete the statements using $>$ $<$ or $=$.

A.

$$44 \div 4$$



$$36 \div 4$$

B.

$$24 \div 4$$



$$20 \div 4$$

C.

$$12 \div 4$$



$$16 \div 4$$



VF
HW/Ext

9. Wiktor and Kai are discussing drawing a bar model to calculate $24 \div 4$.

I will divide my bar model into 6 groups of 4.



Wiktor

Kai

I will halve my bar model and then halve it again.

Who is correct? Prove it and support your answer by drawing the bar models.



RPS
HW/Ext

Homework/Extension

Divide by 4

Developing

1. A and E, B and F, C and D
2. A is < and B is >
3. Josh is correct. The bar model has been divided into 4 groups and there are 5 counters in each group because $20 \div 4 = 5$.

Expected

4. A and F ($24 \div 4 = 6$), B and D ($36 \div 4 = 9$), C and E ($20 \div 4 = 5$)
5. A is < and B is >
6. Helena is correct. The bar model has been divided into 4 groups and there are 8 in each because $32 \div 4 = 8$.

Greater Depth

7. A. Accept any representation that accurately shows $32 \div 4 = 8$;
B. Accept any representation that accurately shows $48 \div 4 = 12$;
C. Accept any representation that accurately shows $28 \div 4 = 7$.
8. A is >, B is > and C is <
9. They are both correct. Wiktorja can divide her bar model into 6 groups with 4 in each group. If Kai halved his bar model and then halved it again, he would get 4 groups with 6 in each group.

| | | | | | |
|----|---|---|---|---|---|
| 24 | | | | | |
| 4 | 4 | 4 | 4 | 4 | 4 |

Wiktorja

| | | | |
|----|---|----|---|
| 24 | | | |
| 12 | | 12 | |
| 6 | 6 | 6 | 6 |

Kai