# i-Ready®

# Grado 3 Matemáticas

## Paquete de actividades para el hogar del maestro

Este Paquete de actividades para el hogar incluye un conjunto de 26 problemas prácticos que están alineados con importantes conceptos de matemáticas en los que los estudiantes ya han trabajado durante este año.

Debido a que el grado de avance varía de un salón a otro, siéntase con la libertad de seleccionar las páginas que se alineen con los temas que sus estudiantes ya han cubierto.

El Paquete de actividades para el hogar incluye instrucciones para los padres que se pueden imprimir y enviar a casa.

**Este es un Paquete de actividades para el hogar. La Guía del maestro incluye los mismos conjuntos de práctica que la versión del estudiante, con respuestas como referencia.**

¡Mire los conceptos de Matemáticas del Grado 3 que cubre este paquete!

# Grado 3 Conceptos de matemáticas cubiertos en este paquete

| Concept<br>*Concepto* | Practice<br>*Práctica* | Fluency and Skills Practice<br>*Fluidez y práctica de destrezas* | Page<br>*Página* |
|---|---|---|---|
| Understanding Multiplication Concepts<br><br>*Comprender conceptos de multiplicación* | 1 | Understanding of Multiplication Models<br>*(Comprender los modelos de multiplicación)* | **4** |
| Practicing Multiplication Facts<br><br>*Practicar datos de multiplicación* | 2 | Multiplying with 2, 5, and 10<br>*(Multiplicar con 2, 5 y 10)* | **5** |
| | 3 | Multiplying with 0 and 1<br>*(Multiplicar con 0 y 1)* | **6** |
| | 4 | Multiplying with 3<br>*(Multiplicar con 3)* | **7** |
| | 5 | Multiplying with 4<br>*(Multiplicar con 4)* | **8** |
| | 6 | Multiplying with 6<br>*(Multiplicar con 6)* | **9** |
| | 7 | Multiplying with 7<br>*(Multiplicar con 7)* | **10** |
| | 8 | Multiplying with 8<br>*(Multiplicar con 8)* | **11** |
| | 9 | Multiplying with 9<br>*(Multiplicar con 9)* | **12** |
| Using Properties of Multiplication<br><br>*Usar las propiedades de la multiplicación* | 10 | Using Order to Multiply<br>*(Ordenar para multiplicar)* | **13** |
| | 11 | Using Grouping to Multiply<br>*(Agrupar para multiplicar)* | **14** |
| | 12 | Using Order and Grouping to Multiply<br>*(Ordenar y agrupar para multiplicar)* | **15** |
| Understanding Division Concepts<br><br>*Comprender los conceptos de la división* | 13 | Understanding of Division Models<br>*(Comprender los modelos de división)* | **16** |
| | 14 | Understanding of How Multiplication and Division Are Connected<br>*(Comprender cómo se relacionan la multiplicación y la división)* | **17** |
| Practicing Division Facts<br><br>*Practicar datos de división* | 15 | Working with Division Facts<br>*(Trabajar con datos de división)* | **18** |
| | 16 | Using a Multiplication Table<br>*(Usar una tabla de multiplicar)* | **19** |
| | 17 | Understanding of Patterns<br>*(Comprender los patrones)* | **20** |

**i-Ready**

Grado 3 Conceptos de matemáticas cubiertos en este paquete (continuación)

| Concept<br>*Concepto* | Practice<br>*Práctica* | Fluency and Skills Practice<br>*Fluidez y práctica de destrezas* | Page<br>*Página* |
|---|---|---|---|
| Solving Word Problems with Multiplication and Division<br><br>*Resolver problemas verbales con multiplicación y división* | 18 | Solving Problems About Equal Groups<br>*(Resolver problemas sobre grupos iguales)* | **21** |
| | 19 | Solving Problems About Arrays<br>*(Resolver problemas sobre matrices)* | **22** |
| | 20 | Solving Problems About Area<br>*(Resolver problemas sobre el área)* | **23** |
| | 21 | Solving Two-Step Word Problems Using Two Equations<br>*(Resolver problemas verbales de dos pasos usando dos ecuaciones)* | **24** |
| | 22 | Solving Two-Step Word Problems Using One Equation<br>*(Resolver problemas verbales de dos pasos usando una ecuación)* | **25** |
| | 23 | Estimating Solutions to Word Problems<br>*(Estimar soluciones a problemas verbales)* | **26** |
| Understanding Fraction Concepts<br><br>*Comprender los conceptos de fracciones* | 24 | Describing Parts of a Whole with Fractions<br>*(Describir las partes de un entero con fracciones)* | **27** |
| | 25 | Understanding of Fractions on a Number Line<br>*(Comprender fracciones en una recta numérica)* | **29** |
| Telling Time<br>*Decir la hora* | 26 | Telling Time to the Minute<br>*(Decir la hora en minutos)* | **31** |

**1** Show 3 × 5 by drawing equal groups of 5.
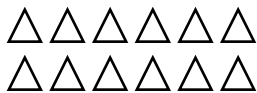
**Answers will vary. Possible answer shown.**



Show 3 × 5 by drawing an array.
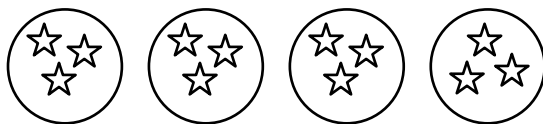
**Answers will vary. Possible answer shown.**



Complete the equation. 3 × 5 = __**15**__

**2** Write an equation that matches the array.



**2 × 6 = 12**

**3** Write an equation that matches the picture.



**4 × 3 = 12**

**4** Use words to describe the drawing for problem 3.

**Answers will vary. Possible answer: There are four groups of three stars. There are 12 stars in all.**

**Multiply.**

**1** $5 \times 2 =$ __**10**__

**2** $2 \times 5 =$ __**10**__

**3** $2 \times 10 =$ __**20**__

**4** $10 \times 2 =$ __**20**__

**5** $10 \times 5 =$ __**50**__

**6** $5 \times 10 =$ __**50**__

**7** $6 \times 2 =$ __**12**__

**8** $2 \times 6 =$ __**12**__

**9** $3 \times 10 =$ __**30**__

**10** $10 \times 3 =$ __**30**__

**11** $7 \times 2 =$ __**14**__

**12** $2 \times 7 =$ __**14**__

**13** $4 \times 10 =$ __**40**__

**14** $10 \times 4 =$ __**40**__

**15** $5 \times 4 =$ __**20**__

**16** $4 \times 5 =$ __**20**__

**17** $2 \times 2 =$ __**4**__

**18** $5 \times 5 =$ __**25**__

**19** $10 \times 10 =$ __**100**__

**20** What patterns do you notice in the problems? Explain.

**Answers will vary. Possible answer: I notice that if the two factors are the same, but in a different order, the product is also the same.**

**21** Draw a model to show how you solved one of the problems.

**Answers will vary.**

**Write the missing digits in the boxes to make each multiplication problem true.**

$3 \times 1 = \boxed{3}$ $\quad$ $0 \times 7 = \boxed{0}$ $\quad$ $5 \times 1 = \boxed{5}$ $\quad$ $1 \times 0 = \boxed{0}$

$1 \times 7 = \boxed{7}$ $\quad$ $4 \times \boxed{0} = 0$ $\quad$ $4 \times \boxed{1} = 4$ $\quad$ $9 \times \boxed{0} = 0$

$\boxed{3} \times 1 = 3$ $\quad$ $\boxed{1} \times 9 = 9$ $\quad$ $\boxed{0} \times 8 = 0$ $\quad$ $\boxed{0} \times 6 = 0$

**Write two factors to make each multiplication problem true. Possible answers shown.**

$\boxed{5} \times \boxed{1} = 5$ $\quad$ $\boxed{7} \times \boxed{1} = 7$ $\quad$ $\boxed{2} \times \boxed{1} = 2$ $\quad$ $\boxed{1} \times \boxed{1} = 1$

**Write a digit in the box to make the multiplication problem true. Then use words to write about the groups.**

$$\boxed{\phantom{0}} \times 0 = 0$$

**Answers will vary. Possible answer: 4 × 0 = 0. There are 4 groups and each group has 0 objects. There are 0 objects in all.**

**Multiply.**

**1** $2 \times 3 =$ ___6___  **2** $3 \times 2 =$ ___6___  **3** $10 \times 3 =$ ___30___  **4** $3 \times 10 =$ ___30___

**5** $5 \times 3 =$ ___15___  **6** $3 \times 5 =$ ___15___  **7** $4 \times 3 =$ ___12___  **8** $3 \times 4 =$ ___12___

**9** $9 \times 3 =$ ___27___  **10** $3 \times 9 =$ ___27___  **11** $1 \times 3 =$ ___3___  **12** $3 \times 1 =$ ___3___

**13** $8 \times 3 =$ ___24___  **14** $3 \times 8 =$ ___24___  **15** $6 \times 3 =$ ___18___  **16** $3 \times 6 =$ ___18___

**17** $7 \times 3 =$ ___21___  **18** $3 \times 7 =$ ___21___  **19** $0 \times 3 =$ ___0___  **20** $3 \times 3 =$ ___9___

**21** Tell how you could check that your answer to problem 9 is correct.

**Answers will vary. Possible answer: I could add 9 three times: $9 + 9 + 9 = 27$.**

**22** Draw a model to show how you solved one of the problems.

**Answers will vary.**

**Multiply.**

**1** $2 \times 4 =$ ___8___  **2** $3 \times 4 =$ ___12___  **3** $10 \times 4 =$ ___40___  **4** $5 \times 4 =$ ___20___

**5** $7 \times 4 =$ ___28___  **6** $6 \times 4 =$ ___24___  **7** $8 \times 4 =$ ___32___  **8** $9 \times 4 =$ ___36___

**9** $1 \times 4 =$ ___4___  **10** $4 \times 5 =$ ___20___  **11** $0 \times 4 =$ ___0___  **12** $4 \times 10 =$ ___40___

**13** $4 \times 3 =$ ___12___  **14** $4 \times 2 =$ ___8___  **15** $4 \times 1 =$ ___4___  **16** $4 \times 4 =$ ___16___

**17** Tell what strategy you used to solve $6 \times 4$.

**Answers will vary. Possible answer: I broke $6 \times 4$ into $6 \times 2$ and $6 \times 2$. Then I added $12 + 12 = 24$.**

**18** Draw a model to show how you solved one of the problems.

**Answers will vary.**

**Multiply.**

**1** $5 \times 6 =$ ___30___　　**2** $3 \times 6 =$ ___18___　　**3** $10 \times 6 =$ ___60___　　**4** $2 \times 6 =$ ___12___

**5** $7 \times 6 =$ ___42___　　**6** $4 \times 6 =$ ___24___　　**7** $8 \times 6 =$ ___48___　　**8** $1 \times 6 =$ ___6___

**9** $9 \times 6 =$ ___54___　　**10** $6 \times 5 =$ ___30___　　**11** $0 \times 6 =$ ___0___　　**12** $6 \times 10 =$ ___60___

**13** $6 \times 3 =$ ___18___　　**14** $6 \times 2 =$ ___12___　　**15** $6 \times 5 =$ ___30___　　**16** $6 \times 6 =$ ___36___

**17** Tell a strategy you can use to show $5 \times 6$.

**Answers will vary. Possible answer: I can draw an array showing 5 rows with 6 in each row to show 30 in all.**

**18** Explain how problem 2 and problem 13 are related.

**They have the same factors in a different order. They have the same product.**

**The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.**

**1** $3 \times 7 = $ _____21_____

**2** $6 \times 7 = $ _____42_____

**3** $8 \times 7 = $ _____56_____

**4** $2 \times 7 = $ _____14_____

**5** $9 \times 7 = $ _____63_____

**6** $1 \times 7 = $ _____7_____

**7** $7 \times 0 = $ _____0_____

**8** $10 \times 7 = $ _____70_____

**9** $4 \times 7 = $ _____28_____

**10** $5 \times 7 = $ _____35_____

**11** $7 \times 3 = $ _____21_____

**12** $0 \times 7 = $ _____0_____

**13** $7 \times 2 = $ _____14_____

**14** $7 \times 10 = $ _____70_____

**15** $7 \times 4 = $ _____28_____

**16** $7 \times 1 = $ _____7_____

**17** $7 \times 5 = $ _____35_____

**18** $7 \times 7 = $ _____49_____

**Answers**

| | | | | | |
|---|---|---|---|---|---|
| 14 | 63 | 35 | 70 | 0 | 42 |
| 7 | 28 | 14 | 21 | 56 | 21 |
| 28 | 0 | 70 | 49 | 35 | 7 |

**The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.**

**1** $2 \times 8 =$ ___16___

**2** $6 \times 8 =$ ___48___

**3** $7 \times 8 =$ ___56___

**4** $3 \times 8 =$ ___24___

**5** $9 \times 8 =$ ___72___

**6** $1 \times 8 =$ ___8___

**7** $0 \times 8 =$ ___0___

**8** $10 \times 8 =$ ___80___

**9** $4 \times 8 =$ ___32___

**10** $5 \times 8 =$ ___40___

**11** $8 \times 3 =$ ___24___

**12** $8 \times 0 =$ ___0___

**13** $8 \times 2 =$ ___16___

**14** $8 \times 10 =$ ___80___

**15** $8 \times 4 =$ ___32___

**16** $8 \times 7 =$ ___56___

**17** $8 \times 5 =$ ___40___

**18** $8 \times 8 =$ ___64___

**Answers**

| | | | | | |
|---|---|---|---|---|---|
| 64 | 40 | 48 | 8 | 0 | 56 |
| 72 | 80 | 24 | 32 | 16 | 32 |
| 24 | 0 | 80 | 40 | 56 | 16 |

**The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.**

**1** $1 \times 9 =$ ___9___

**2** $6 \times 9 =$ ___54___

**3** $7 \times 9 =$ ___63___

**4** $2 \times 9 =$ ___18___

**5** $8 \times 9 =$ ___72___

**6** $3 \times 9 =$ ___27___

**7** $0 \times 9 =$ ___0___

**8** $10 \times 9 =$ ___90___

**9** $4 \times 9 =$ ___36___

**10** $5 \times 9 =$ ___45___

**11** $9 \times 3 =$ ___27___

**12** $9 \times 8 =$ ___72___

**13** $9 \times 2 =$ ___18___

**14** $9 \times 10 =$ ___90___

**15** $9 \times 4 =$ ___36___

**16** $9 \times 7 =$ ___63___

**17** $9 \times 5 =$ ___45___

**18** $9 \times 9 =$ ___81___

**Answers**

| | | | | | |
|---|---|---|---|---|---|
| 63 | 45 | 18 | 81 | 90 | 36 |
| 72 | 54 | 27 | 36 | 72 | 63 |
| 90 | 0 | 18 | 9 | 27 | 45 |

**i-Ready**

**Write the missing numbers in the boxes to make each multiplication problem true.**

$5 \times 6 = \boxed{30}$          $2 \times 6 = \boxed{12}$          $4 \times 5 = \boxed{20}$

$6 \times 5 = \boxed{30}$          $6 \times 2 = \boxed{12}$          $5 \times 4 = \boxed{20}$

$3 \times 8 = \boxed{24}$          $4 \times 7 = \boxed{28}$          $5 \times 9 = \boxed{45}$

$8 \times 3 = \boxed{24}$          $7 \times 4 = \boxed{28}$          $9 \times 5 = \boxed{45}$

$9 \times 2 = \boxed{18}$          $\boxed{3} \times 5 = 15$          $7 \times 8 = \boxed{56}$

$2 \times \boxed{9} = 18$          $5 \times 3 = \boxed{15}$          $\boxed{8} \times 7 = 56$

$\boxed{7} \times 10 = 70$          $\boxed{2} \times 5 = 10$          $3 \times \boxed{4} = 12$

$10 \times \boxed{7} = 70$          $5 \times \boxed{2} = 10$          $\boxed{4} \times 3 = 12$

**1** Look at $6 \times 5$ and $5 \times 6$. How does the order of the factors change the product?

**Answers will vary. Possible answer: The order of the factors does not change the product.**

**2** Draw two arrays to show $4 \times 7$ and $7 \times 4$.

**Answers will vary. Arrays should show 4 rows of 7 objects and 7 rows of 4 objects.**

**Draw parentheses around the numbers you want to multiply first.**
**Then find the product.** Groupings may vary. Possible groupings are shown.

**1** $6 \times 3 \times 2$
$6 \times (3 \times 2)$
$6 \times 6 = 36$
Sample Student Work:
$3 \times 2 = 6; 6 \times 6 = 36$

**2** $4 \times 3 \times 3$
$4 \times (3 \times 3)$
$3 \times 3 = 9, 4 \times 9 = 36$

**3** $5 \times 2 \times 8$
$(5 \times 2) \times 8$
$5 \times 2 = 10, 10 \times 8 = 80$

**4** $8 \times 2 \times 4$
$8 \times (2 \times 4)$
$2 \times 4 = 8, 8 \times 8 = 64$

**5** $2 \times 2 \times 7$
$(2 \times 2) \times 7$
$2 \times 2 = 4, 4 \times 7 = 28$

**6** $6 \times 5 \times 2$
$6 \times (5 \times 2)$
$5 \times 2 = 10, 6 \times 10 = 60$

**7** $3 \times 3 \times 7$
$(3 \times 3) \times 7$
$3 \times 3 = 9, 9 \times 7 = 63$

**8** $2 \times 4 \times 5$
$(2 \times 4) \times 5$
$2 \times 4 = 8, 8 \times 5 = 40$

**9** $7 \times 4 \times 2$
$7 \times (4 \times 2)$
$4 \times 2 = 8, 7 \times 8 = 56$

**10** $6 \times 3 \times 3$
$6 \times (3 \times 3)$
$3 \times 3 = 9, 6 \times 9 = 54$

**11** $3 \times 3 \times 10$
$(3 \times 3) \times 10$
$3 \times 3 = 9, 9 \times 10 = 90$

**12** $2 \times 3 \times 4$
$(2 \times 3) \times 4$
$2 \times 3 = 6, 6 \times 4 = 24$

**13** How did you decide which factors to group?

**Answers will vary. Possible answer: I looked for factors that were basic facts.**

**14** Choose one problem. Tell two ways you can group the factors. Then explain which way is easier for you to solve.

**Answers will vary. Possible answer: $3 \times 3 \times 10 = 90$. I can group the factors: $(3 \times 3) \times 10$, or $3 \times (3 \times 10)$. It is easier for me to solve $9 \times 10$ because I know the 10 facts.**

**Order and group the factors to show how you want to multiply. Then find the product. Possible orders and grouping are shown.**

**1** $5 \times 7 \times 2$
$5 \times 2 \times 7$
$(5 \times 2) \times 7$
$10 \times 7 = 70$

**2** $3 \times 5 \times 3$
**$3 \times 3 \times 5$**
**$(3 \times 3) \times 5$**
**$9 \times 5 = 45$**

**3** $4 \times 8 \times 2$
**$4 \times 2 \times 8$**
**$(4 \times 2) \times 8$**
**$8 \times 8 = 64$**

**4** $2 \times 9 \times 5$
**$2 \times 5 \times 9$**
**$(2 \times 5) \times 9$**
**$10 \times 9 = 90$**

**5** $2 \times 10 \times 5$
**$2 \times 5 \times 10$**
**$(2 \times 5) \times 10$**
**$10 \times 10 = 100$**

**6** $2 \times 8 \times 2$
**$2 \times 2 \times 8$**
**$(2 \times 2) \times 8$**
**$4 \times 8 = 32$**

**7** $3 \times 9 \times 3$
**$3 \times 3 \times 9$**
**$(3 \times 3) \times 9$**
**$9 \times 9 = 81$**

**8** $5 \times 2 \times 6$
**$(5 \times 2) \times 6$**
**$10 \times 6 = 60$**

**9** $4 \times 5 \times 2$
**$4 \times 2 \times 5$**
**$(4 \times 2) \times 5$**
**$8 \times 5 = 40$**

**10** $2 \times 9 \times 2$
**$2 \times 2 \times 9$**
**$(2 \times 2) \times 9$**
**$4 \times 9 = 36$**

**11** $3 \times 8 \times 2$
**$3 \times 2 \times 8$**
**$(3 \times 2) \times 8$**
**$6 \times 8 = 48$**

**12** $4 \times 2 \times 7$
**$(4 \times 2) \times 7$**
**$8 \times 7 = 56$**

**13** What strategies did you use to decide how to order and group the factors?

**Answers will vary. Possible answer: I looked for factors with a product that was 10 or less. I wrote those factors next to each other, and multiplied them first.**

**14** Why do you need to reorder factors in some problems?

**Answers will vary. Possible answer: If you don't know how to multiply two factors, and more than two factors are given, you can write the factors in another order and group factors together that are easier to multiply.**

**1** Draw a model to show 12 ÷ 6. Show 6 equal groups. How many are in each group?

**Possible picture shown.**

X X    X X    X X    X X    X X    X X
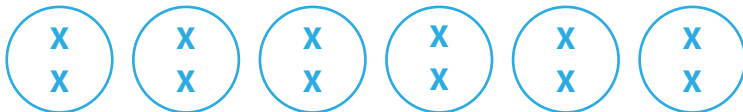
There are 12 in all. There are 6 equal groups. There are _____**2**_____ in each group.
12 ÷ 6 = _____**2**_____

**2** Draw a model to show 12 ÷ 6. Show 6 in each group. How many groups are there?

**Possible picture shown.**

X X X  X X X
X X X  X X X

There are 12 in all. There are 6 in each group. There are _____**2**_____ groups.
12 ÷ 6 = _____**2**_____

**3** Draw an array to find 21 ÷ 3.

**Answers will vary. Possible Answer:**
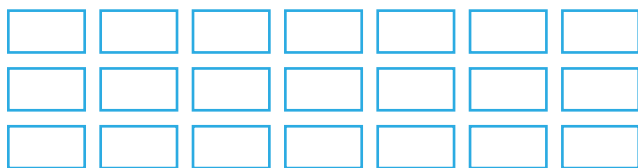
21 ÷ 3 = _____**7**_____

**4** Draw an array to find 20 ÷ 4.

**Answers will vary. Possible Answer:**
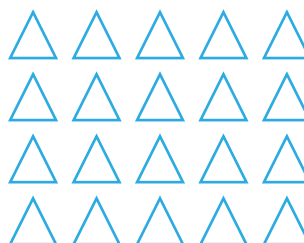
20 ÷ 4 = _____**5**_____

**5** What situation could be modeled with the equation 40 ÷ 8 = 5?

**Answers will vary. Possible answer: 40 coins shared equally with 8 people would be 5 coins per person.**

**i-Ready**
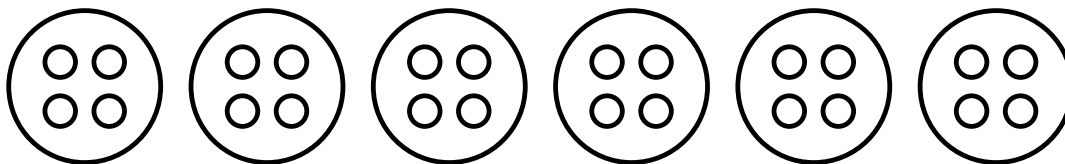
**1** There are 24 marbles. Each bag has 4 marbles.

Write an equation that shows the number of bags.

$24 \div 4 = 6$

**2** There are 24 marbles. An equal number of marbles are in 6 bags.

Write an equation that shows the number of marbles in each bag.

$24 \div 6 = 4$

**3** There are 6 bags of marbles. 4 marbles are in each bag.

Write two different equations that show the total number of marbles.
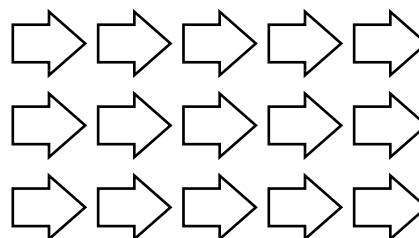
$6 \times 4 = 24$        $4 \times 6 = 24$

**4** Write 2 multiplication equations and 2 division equations for this array.

$3 \times 5 = 15$        $5 \times 3 = 15$

$15 \div 3 = 5$        $15 \div 5 = 3$

Find the value of ? to complete each fact.

**5** $6 \times ? = 48$
$48 \div 6 = ?$
$? = \underline{\quad 8 \quad}$

**6** $? \times 5 = 45$
$45 \div ? = 5$
$? = \underline{\quad 9 \quad}$

**7** $63 \div 9 = ?$
$? \times 9 = 63$
$? = \underline{\quad 7 \quad}$

**8** $32 \div ? = 8$
$8 \times ? = 32$
$? = \underline{\quad 4 \quad}$

**The answers are mixed up at the bottom of the page. Cross out the answers as you complete the problems.**

**1** $40 \div 4 =$ __**10**__

**2** $18 \div 3 =$ __**6**__

**3** $24 \div 4 =$ __**6**__

**4** $24 \div 8 =$ __**3**__

**5** $14 \div 2 =$ __**7**__

**6** $40 \div 8 =$ __**5**__

**7** $42 \div 7 =$ __**6**__

**8** $64 \div 8 =$ __**8**__

**9** $32 \div 8 =$ __**4**__

**10** $56 \div 8 =$ __**7**__

**11** $27 \div 9 =$ __**3**__

**12** $28 \div 7 =$ __**4**__

**13** $72 \div 8 =$ __**9**__

**14** $90 \div 9 =$ __**10**__

**15** $54 \div 9 =$ __**6**__

**16** $48 \div 8 =$ __**6**__

**17** $49 \div 7 =$ __**7**__

**18** $27 \div 3 =$ __**9**__

**Answers:**

| | | | | | |
|---|---|---|---|---|---|
| 4 | 4 | 9 | 6 | 7 | 10 |
| 5 | 10 | 3 | 3 | 6 | 7 |
| 8 | 6 | 6 | 7 | 6 | 9 |

| × | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|
| 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 2 | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 |
| 4 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| 5 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 6 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| 7 | 7 | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70 |
| 8 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| 9 | 9 | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90 |
| 10 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

**Write the missing numbers in the boxes to make each multiplication or division problem true.**

$5 \times 7 = \boxed{35}$  $\qquad$  $32 \div 8 = \boxed{4}$  $\qquad$  $4 \times 7 = \boxed{28}$  $\qquad$  $27 \div \boxed{3} = 9$

$\boxed{35} \div 5 = 7$  $\qquad$  $8 \times \boxed{4} = 32$  $\qquad$  $\boxed{28} \div 4 = 7$  $\qquad$  $9 \times \boxed{3} = 27$

$4 \times 4 = \boxed{16}$  $\qquad$  $9 \times 6 = \boxed{54}$  $\qquad$  $6 \times 6 = \boxed{36}$  $\qquad$  $81 \div \boxed{9} = 9$

$\boxed{16} \div 4 = 4$  $\qquad$  $54 \div \boxed{9} = 6$  $\qquad$  $63 \div \boxed{7} = 9$  $\qquad$  $40 \div 8 = \boxed{5}$

$\boxed{48} \div 8 = 6$  $\qquad$  $56 \div \boxed{7} = 8$  $\qquad$  $45 \div 5 = \boxed{9}$  $\qquad$  $\boxed{49} \div 7 = 7$

**1** Write 3 possible answers for the equation $36 \div \boxed{\phantom{0}} = \boxed{\phantom{0}}$.

**Answers will vary. Possible answers: 36 ÷ 6 = 6, 36 ÷ 4 = 9, 36 ÷ 9 = 4**

**Solve. Look for patterns.**

**1** Subtract.

$10 - 1 =$ ___9___          $20 - 1 =$ ___19___          $30 - 1 =$ ___29___

$100 - 1 =$ ___99___          $200 - 1 =$ ___199___          $300 - 1 =$ ___299___

$200 - 100 =$ ___100___          $300 - 100 =$ ___200___          $400 - 100 =$ ___300___

$200 - 101 =$ ___99___          $300 - 101 =$ ___199___          $400 - 101 =$ ___299___

**2** Multiply.

$2 \times 10 =$ ___20___                    $2 \times 9 =$ ___18___

$3 \times 10 =$ ___30___                    $3 \times 9 =$ ___27___

$4 \times 10 =$ ___40___                    $4 \times 9 =$ ___36___

$5 \times 10 =$ ___50___                    $5 \times 9 =$ ___45___

$6 \times 10 =$ ___60___                    $6 \times 9 =$ ___54___

$7 \times 10 =$ ___70___                    $7 \times 9 =$ ___63___

$8 \times 10 =$ ___80___                    $8 \times 9 =$ ___72___

$9 \times 10 =$ ___90___                    $9 \times 9 =$ ___81___

**3** Describe the patterns that you notice in the problems you just solved.

**Answers will vary.**

**Read and solve each problem. Show your work.**

**1** Heather has 18 photographs of rockets. She wants to hang them on 3 different walls in her room. Each wall will have the same number of photographs. How many photographs will hang on each wall?

There will be ____**6**____ photographs on each wall.

**2** There are 24 people who want to play volleyball. The coach divides the players into teams of 6. How many teams can she make?

The coach can make ____**4**____ teams.

**3** At an art show, there are 7 groups of paintings with 6 paintings in each group. How many paintings are there in all?

There are ____**42**____ paintings.

**4** Jasmine reads for 10 minutes each night. If she reads for 5 nights, how many minutes will she read in all?

Jasmine will read for ____**50**____ minutes.

**5** Rhonda plants 28 tomato plants in her garden. She plants 7 tomato plants in each row. How many rows does she plant?

Rhonda plants ____**4**____ rows.

**6** Mr. Jones buys 6 packages of pencils. There are 8 pencils in each package. How many pencils does Mr. Jones buy?

Mr. Jones buys ____**48**____ pencils.

**7** Choose one problem. Describe the strategy you used to solve it.

**Answers will vary. Possible answer: In problem 4, I drew an array with 10 objects in 5 rows, for a total of 50 objects.**

**Read and solve each problem. Show your work.**

**1** A parking lot has 6 rows of parking spaces. There are 5 spaces in each row. How many parking spaces are in the lot?

There are _____**30**_____ parking spaces.

**2** Jack has 36 toy robots. He wants to display 9 on each shelf in his room. How many shelves will Jack need to display all of the robots?

Jack will need _____**4**_____ shelves.

**3** There are 24 dancers. The teacher has them stand in 3 equal rows. How many dancers are in each row?

There are _____**8**_____ dancers in each row.

**4** Emily is putting away plates. She puts 6 plates each in 3 stacks. How many plates does she put away?

Emily puts away _____**18**_____ plates.

**5** A farmer picks 54 pumpkins. She places an equal number of pumpkins in 9 wagons. How many pumpkins are in each wagon?

There are _____**6**_____ pumpkins in each wagon.

**6** The school band marches in rows at the parade. There are 24 band members and they form rows with 4 members in each row. How many rows are there?

There are _____**6**_____ rows.

**7** Choose one problem. Describe and use a strategy to check your answer.

**Answers will vary. Possible answer: In problem 3, I can use multiplication to check my answer: $8 \times 3 = 24$.**

**i-Ready**

**Read and solve each problem. Show your work.**

**1** Nya covers a rectangular tray with 1-square-inch tiles. She uses 42 tiles, arranged in 7 rows. How many tiles are in each row?

There are ____**6**____ tiles in each row.

**2** Jacob uses tiles to cover a rectangular hallway. Each tile has an area of 1 square foot. He uses 3 rows of tiles, with 8 tiles in each row. What is the area of the hallway?

The area of the hallway is ____**24**____ square feet.

**3** Sara covers the top of a box with squares of paper that are 1 square centimeter. She uses 48 squares, with 6 squares in each row. How many rows did she make?

Sara made ____**8**____ rows.

**4** There are 64 squares on Rasha's chessboard. Each square is 1 square inch. There are 8 rows of squares on her chessboard. How many squares are in each row?

There are ____**8**____ squares in each row.

**5** A rectangular patio at an outdoor restaurant is made of 35 tiles. Each tile is 1 square yard. If there are 5 tiles in each row, how many rows are there?

There are ____**7**____ rows of tiles.

**6** Mr. Reilly uses square pieces of fabric that are each 1 square inch for a rectangular wall hanging. He uses 81 squares. If he makes 9 rows of squares, how many squares will be in each row?

There will be ____**9**____ squares in each row.

**7** Choose one problem. Describe the strategy you used to solve it.

**Answers will vary. Possible answer: In problem 3, I drew an array with 6 squares in a row. Then I drew rows of 6 until I had 48 squares. I counted the number of rows.**

**8** Explain why you chose that strategy to solve the problem.

**Answers will vary.**

## Solving Two-Step Word Problems Using Two Equations

**Read and solve each problem by writing an equation for each step. Use letters for the unknown numbers. Show your work.** **Possible equations shown.**

**1** Hirami has 12 cups of flour in a bag and 6 cups of flour in a jar. He is making batches of bread that each call for 3 cups of flour. How many batches of bread can Hirami make?

$12 + 6 = c$
$18 = c$
$18 \div 3 = b$
$6 = b$

Hirami can make ____**6**____ batches of bread.

**2** Cassi bought 50 pounds of dirt. She used 10 pounds to fill a hole in her yard. Then she filled pots with 5 pounds of soil in each pot. How many pots could she fill?

$50 - 10 = d$
$40 = d$
$40 \div 5 = p$
$8 = p$

Cassi can fill ____**8**____ pots.

**3** Becky has 6 packages of clay that each weigh 5 pounds. To make a bowl, she needs 3 pounds of clay. How many bowls can Becky make?

$6 \times 5 = p$
$30 = p$
$30 \div 3 = b$
$10 = b$

Becky can make ____**10**____ bowls.

**4** Marc has 36 pounds of apples to use to make pies. He uses 4 pounds of apples for each pie. Marc uses all of the apples to make pies, and then sells each pie for $8. How much money does Marc collect for all the pies?

$36 \div 4 = p$
$9 = p$
$9 \times 8 = m$
$72 = m$

Marc collects $ ____**72**____ for all the pies.

**5** Choose one problem. Tell how you could solve the problem in a different way.

**Answers will vary. Possible answer: In problem 1, I could divide 12 and 6 each by 3, and then add the quotients: 12 ÷ 3 = 4; 6 ÷ 3 = 2; 4 + 2 = 6.**

**Read and solve each problem by writing one equation.**
**Show your work.** **Possible equations shown.**

**1** Mrs. Nelson has one $10-bill and one $20-bill. She wants to buy as many movie tickets as she can with this money. If movie tickets cost $6 each, how many tickets, *t*, can she buy?

$(10 + 20) \div 6 = t$
$30 \div 6 = t$
$5 = t$

Mrs. Nelson can buy ____5____ tickets.

**2** Daisy has a goal of reading 75 minutes in one week. She reads 9 minutes a day for 5 days. How many more minutes, *m*, will she have to read to reach her goal?

$(9 \times 5) + m = 75$
$45 + m = 75$
$m = 30$

Daisy will have to read ____30____ more minutes.

**3** Mr. Garcia buys 3 bags of cat food that each weigh 9 pounds and another bag of cat food that weighs 7 pounds. How many pounds, *p*, of cat food did Mr. Garcia buy?

$(3 \times 9) + 7 = p$
$27 + 7 = p$
$34 = p$

Mr. Garcia bought ____34____ pounds of cat food.

**4** Jackson has 48 trading cards. His sister gives him 12 more cards. Then he puts all his trading cards in 6 equal stacks. How many cards, *c*, are in each stack?

$(48 + 12) \div 6 = c$
$60 \div 6 = c$
$10 = c$

There are ____10____ cards in each stack.

**5** Choose one problem. Explain how you decided which operations to use to solve it.

**Answers will vary. Possible answer: In problem 1, I needed to find the total amount of money first. Since the amounts were not equal, I added. Then I had to find the number of times the sum could be divided by 6.**

**Read each problem. Estimate the answer by rounding to the nearest ten. Then find the actual answer. Show your work.**

**1** Marie has 231 toothpicks in one box and 175 toothpicks in another box. She uses 319 toothpicks to make a bridge. How many toothpicks does she have left?

*Estimate:* There are about ____**90**____ toothpicks left.

Marie has ____**87**____ toothpicks left.

**2** Kennedy School has 124 third-grade students. Carter School has 16 fewer third-grade students than Kennedy School. How many third-grade students in all are at Kennedy School and Carter School?

*Estimate:* There are about ____**220**____ students.

There are ____**232**____ students.

**3** There are 197 oak trees in the park. There are 27 more pine trees than oak trees in the park. How many trees are there in all?

*Estimate:* There are about ____**430**____ trees.

There are ____**421**____ trees in all.

**4** On the first day of a bus trip, Brian and his dad traveled 341 miles. On the second day, they traveled 39 fewer miles. How many miles did they travel in all after two days?

*Estimate:* They traveled about ____**640**____ miles.

They traveled ____**643**____ miles.

**5** How does an estimate help you decide if your answer is reasonable?

**Answers will vary. Possible answer: If my estimate is close to the exact answer, then my exact answer is reasonable.**

**Write the fraction of the figure that is shaded.**

**1**
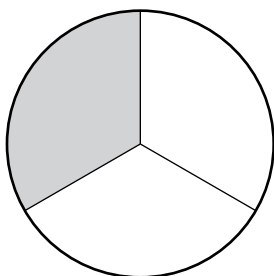
$$\frac{1}{3}$$

**2**
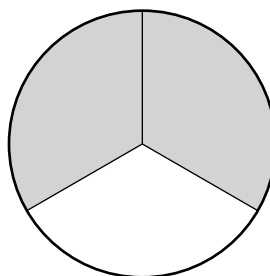
$$\frac{2}{3}$$

**3**
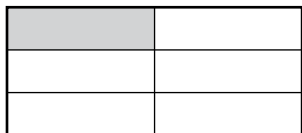
$$\frac{1}{6}$$

**4**

$$\frac{4}{6}$$

**5**

$$\frac{1}{4}$$

**6**

$$\frac{3}{4}$$
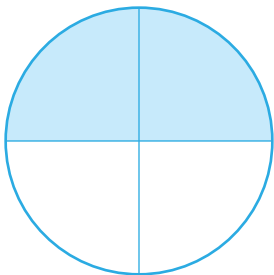
**7**

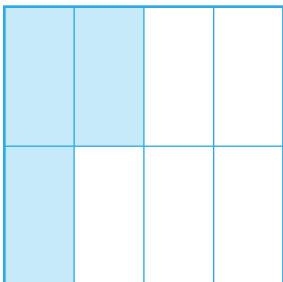$$\frac{1}{8}$$

**8**

$$\frac{5}{8}$$

**i-Ready**
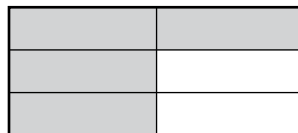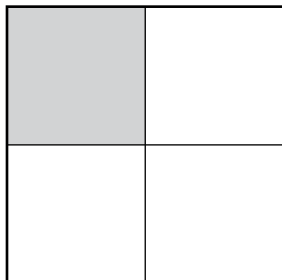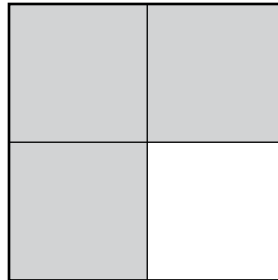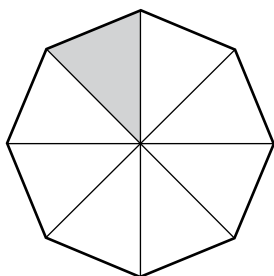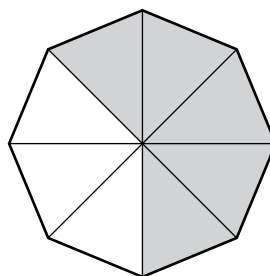
**9** Draw a circle that shows 4 equal parts. Then shade to show $\frac{2}{4}$.

**Possible answer shown.**



**10** Draw a rectangle that shows 3 equal parts. Then shade to show $\frac{2}{3}$.
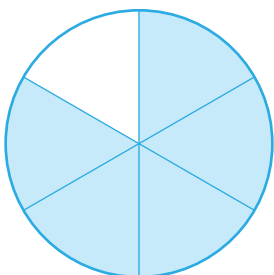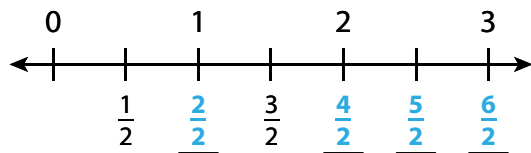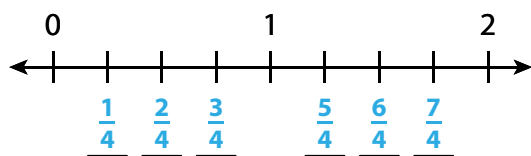
**Possible answer shown.**



**11** Draw a square that shows 8 equal parts. Then shade to show $\frac{3}{8}$.

**Possible answer shown.**



**12** Draw a circle that shows 6 equal parts. Then shade to show $\frac{5}{6}$.

**Possible answer shown.**

## Set A

**Write the missing labels on the number line.**

$$\begin{array}{ccccccc}
0 & & 1 & & 2 & & 3 \\
\end{array}$$

$\frac{1}{2}$ $\frac{2}{2}$ $\frac{3}{2}$ $\frac{4}{2}$ $\frac{5}{2}$ $\frac{6}{2}$

## Set B

**Use this number line to solve problems 1–4.**

$$\begin{array}{ccc}
0 & 1 & 2 \\
\end{array}$$

$\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ $\frac{5}{4}$ $\frac{6}{4}$ $\frac{7}{4}$

**1** How many equal parts are between 0 and 1? **4**

**2** How many equal parts are between 1 and 2? **4**

**3** What fraction does each part show? $\frac{1}{4}$

**4** Write fractions to label the marks.

### Set C

**Use this number line to solve problems 5–7.**



**5** *A* is $\frac{1}{3}$ _____.

**6** *B* is $\frac{4}{3}$ _____.

**7** *C* is $\frac{5}{3}$ _____.

### Set D

**Use this number line to solve problems 8–10.**
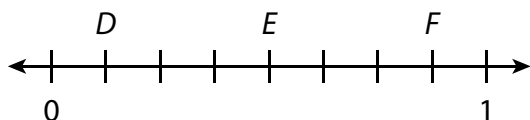


**8** *D* is $\frac{1}{8}$ _____.

**9** *E* is $\frac{4}{8}$ _____.

**10** *F* is $\frac{7}{8}$ _____.
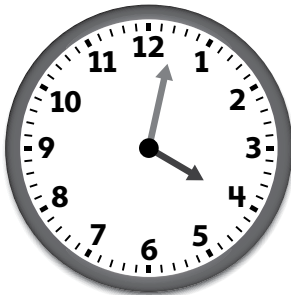
**Write the time the clock shows.**

**1**
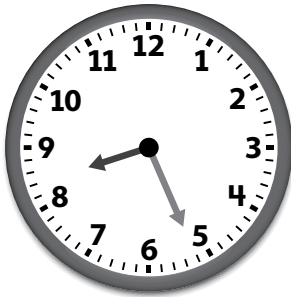
8:26

**2**
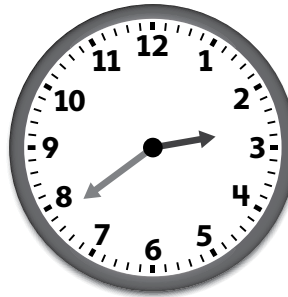
2:39

**3**

4:02

**4**
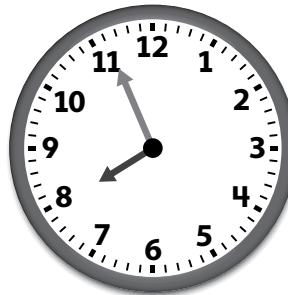
7:56

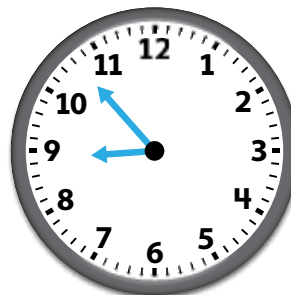**Draw hands on the clock to show the given time.**
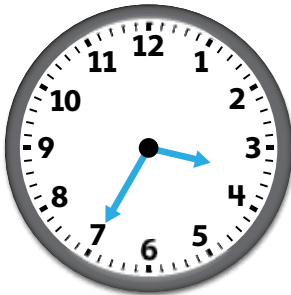
**5** 16 minutes after 1
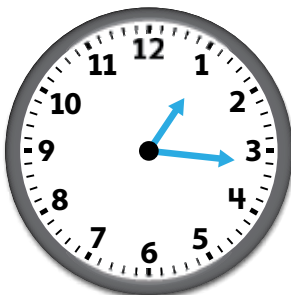
**6** 7 minutes before 9

**7** 35 minutes after 3



**8** 26 minutes before 8



**9** Write a word problem that could use one of the times shown on one of the clocks.

**Answers will vary. Possible answer: Kara leaves for school at 26 minutes before 8. What is another way to write that time?**