CRAVEN
COMMUNITY COLLEGE

TABE Math-E

PAXEN

Unit-3 Multiply and Divide Whole Numbers

Lesson 18
DIVISION
and
FACTORS

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Some graphics may not have copied well during the scan process.

Math-E - Lesson 18 – Division

Division is the opposite of multiplication. You can use multiplication facts to help you solve division problems.

Example Divide. $20 \div 4 =$

1) Think multiplication. 4 times what number is equal to 20?

   $4 \times$ _____ $= 20?$

2) You can use a multiplication table to help you find the missing factor.

   $4 \times 1 = 4$
   $4 \times 2 = 8$
   $4 \times 3 = 12$
   $4 \times 4 = 16$
   $4 \times 5 = 20$

3) Use the multiplication fact that has a product equal to the number you are dividing to help you solve the division problem.

   I know $4 \times 5 = 20$, so $20 \div 4 = 5$.

Example Tawfik drives 56 miles in 7 hours. He drives the same number of miles each hour. How many miles does he drive each hour?

1) Tawfik drives a total of 56 miles. Divide. $56 \div 7 =$ _____

2) Write a multiplication fact to help you solve the problem.

   $7 \times$ _____ $= 56$

3) Use a multiplication table to help you find the missing factor. Which fact has a product of 56?

   $7 \times 1 = 7$
   $7 \times 2 = 14$
   $7 \times 3 = 21$
   $7 \times 4 = 28$
   $7 \times 5 = 35$
   $7 \times 6 = 42$
   $7 \times 7 = 49$
   $7 \times 8 = 56$

   $7 \times 8 = 56$, so $56 \div 7 = 8$. Tawfik drives 8 miles each hour.

Math-E - Lesson 18 – Division

Test Example

1. Francesca needs to solve 18 ÷ 6. Which factor of 18 can help her solve the problem?

   A. 3 B. 9

   C. 12 D. 108

1. **A** The missing factor is 3. $3 \times 6 = 18$; therefore $18 \div 6 = 3$.

Practice

Read each question. Select the correct answer.

1 Dorian rides his bike 36 miles in 4 hours. How many miles does he ride each hour?

A. 4 B. 6

C. 9 D. 12

2 Which multiplication fact can help you find a solution to 30 ÷ 3?

A. $3 \times 3 =$

B. $3 \times 9 =$

C. $3 \times 10 =$

D. $3 \times 30 =$

3 Which factor of 42 can help you solve 42 ÷ 6?

A. 6 B. 7

C. 8 D. 9

4 Which multiplication fact can help you find a solution to 54 ÷ 9?

A. $5 \times 9 =$

B. $6 \times 9 =$

C. $7 \times 9 =$

D. $8 \times 9 =$

5 Which factor of 35 can help you solve 35 ÷ 5?

A. 4 B. 5

C. 6 D. 7

6 Anastasia needs to place 40 plates equally among 5 tables. How many plates should she place on each table?

A. 5

B. 6

C. 7

D. 8

7 Marissa bought 4 identical shirts. She spent a total of $28. Which multiplication fact can help her find the price per shirt?

A. $28 \times 4 = 112$

B. $14 \times 2 = 28$

C. $4 \times 7 = 28$

D. $7 \times 28 = 196$

8 Which factor of 36 can help you solve 36 ÷ 6?

A. 18

B. 9

C. 6

D. 4

Math-E - Lesson 18 – Division

(3.OA.6)

1. C. $4 \times 9 = 36$; therefore, $36 \div 4 = 9$. Dorian rides 9 miles each hour.

2. C. $3 \times 10 = 30$; therefore, $30 \div 3 = 10$.

3. B. $42 \div 6 = 7$ because $6 \times 7 = 42$.

4. B. $6 \times 9 = 54$; therefore, $54 \div 9 = 6$.

5. D. $35 \div 5 = 7$ because $7 \times 5 = 35$.

6. D. $5 \times 8 = 40$; therefore, $40 \div 5 = 8$. Anastasia should place 8 plates on each table.

7. C. $4 \times 7 = 28$; therefore, $28 \div 4 = 7$.

8. C. $36 \div 6 = 6$ because $6 \times 6 = 36$.

Math-E - Practice 18 – Division

1 Which multiplication fact can help you find a solution to 72 ÷ 8?

A. 8 × 72

B. 8 × 16

C. 8 × 10

D. 8 × 9

2 Tyrina, Kenneth, Rory, and Isabella go out to lunch. The total cost of their meal is $32. They decide to split the bill evenly. How much does each person pay?

A. $8

B. $9

C. $10

D. $12

3 Aswan replaces the batteries in the smoke detectors of his house. He needs a total of 20 batteries. The batteries come in packages of four. How many packages of batteries does Aswan need?

A. 8 packages

B. 7 packages

C. 6 packages

D. 5 packages

4 Which factor of 24 can help you solve 24 ÷ 4?

A. 6

B. 8

C. 12

D. 24

5 Yuya uses a job search engine to look for a job. There are 40 results that are displayed on eight pages, with the same number of results on each page. How many jobs are listed per page?

A. 8 jobs

B. 6 jobs

C. 5 jobs

D. 4 jobs

6 Maya took up gardening when she retired. She buys trays of flowers to plant in her garden. Each tray has six flowers. She buys 42 flowers in all. Which multiplication fact can help you determine how many trays of flowers Maya buys? How many trays of flowers does Maya buy?

A. 6 × 6; 6 trays

B. 6 × 7; 7 trays

C. 6 × 8; 8 trays

D. 6 × 9; 9 trays

7 Tabitha works at a printing shop. She prints the same number of posters each minute. Every three minutes, she prints 12 posters. How many posters does Tabitha print each minute?

A. 4 posters

B. 5 posters

C. 6 posters

D. 7 posters

8 Divit is a baker. He bakes 35 loaves of bread and places the loaves on five racks to cool. Each rack holds the same number of loaves. How many loaves of bread are on each rack?

A. 4 loaves

B. 5 loaves

C. 6 loaves

D. 7 loaves

9 Which multiplication fact can help you find a solution to 15 ÷ 5?

A. 5 × 3

B. 5 × 5

C. 5 × 10

D. 5 × 15

10 Which factor of 56 can help you solve 56 ÷ 8?

A. 9   B. 8

C. 7   D. 6

11 There are 48 cars in a parking lot. The cars are in eight equal rows. How many cars are in each row?

A. 4 cars

B. 6 cars

C. 8 cars

D. 10 cars

12 At a used book sale, paperback books cost $3 each. Xander spends $27 on paperback books. Which multiplication fact can help you determine how many books Xander buys? How many books does Xander buy?

A. 3 × 27; 27 books

B. 3 × 9; 9 books

C. 3 × 3; 3 books

D. 3 × 2; 2 books

13 Which multiplication fact can help you find a solution to 36 ÷ 9?

A. 9 × 18

B. 9 × 12

C. 9 × 6

D. 9 × 4

14 Marcellus is a mechanic. In one 7-hour shift, he performs 14 oil changes. He performs the same number of oil changes each hour. How many oil changes does Marcellus perform each hour?

A. 5 oil changes

B. 4 oil changes

C. 3 oil changes

D. 2 oil changes

15 Which factor of 18 can help you solve 18 ÷ 3?

A. 9

B. 6

C. 5

D. 3

16 Keiko is the president of a non-profit agency that serves people suffering from mental illness. She gives a presentation to her board of directors. She has six topics in her presentation and 36 minutes to give the presentation. She spends the same amount of time on each topic. How many minutes does Keiko spend on each topic?

A. 4 min

B. 6 min

C. 9 min

D. 12 min

17 Winona does seven sets of push-ups. She does a total of 28 push-ups. How many push-ups does Winona do in each set?

A. 8 push-ups

B. 7 push-ups

C. 6 push-ups

D. 4 push-ups

18 A picnic pavilion has room to seat 21 people at three picnic tables. Each picnic table can seat the same number of people. How many people can be seated at each table?

A. 11 people

B. 9 people

C. 7 people

D. 5 people

19 Which factor of 63 can help you solve 63 ÷ 9?

A. 6   B. 7

C. 8   D. 10

20 Which multiplication fact can help you find a solution to 24 ÷ 3?

A. 3 × 3

B. 3 × 6

C. 3 × 8

D. 3 × 10

Math-E - Practice 18 – Division

Practice 18 | Division as Finding an Unknown Factor

pp. 40–41   3.OA.6

1. D. $8 \times 9 = 72$; therefore, $72 \div 8 = 9$.

2. A. $4 \times 8 = 32$; therefore, $32 \div 4 = 8$. Each person pays $8.

3. D. $4 \times 5 = 20$; therefore, $20 \div 4 = 5$. Aswan needs 5 packages of batteries.

4. A. $24 \div 4 = 6$ because $4 \times 6 = 24$.

5. C. $8 \times 5 = 40$; therefore, $40 \div 8 = 5$. There are 5 jobs on each page.

6. B. $6 \times 7 = 42$; therefore, $42 \div 6 = 7$. Maya buys 7 trays of flowers.

7. A. $3 \times 4 = 12$; therefore, $12 \div 3 = 4$. Tabitha prints 4 posters each minute.

8. D. $5 \times 7 = 35$; therefore, $35 \div 5 = 7$. There are 7 loaves of bread on each rack.

9. A. $5 \times 3 = 15$; therefore, $15 \div 5 = 3$.

10. C. $56 \div 8 = 7$ because $8 \times 7 = 56$.

11. B. $8 \times 6 = 48$; therefore, $48 \div 8 = 6$. There are 6 cars in each row.

12. B. $3 \times 9 = 27$; therefore, $27 \div 3 = 9$. Xander buys 9 books.

13. D. $9 \times 4 = 36$; therefore, $36 \div 9 = 4$.

14. D. $7 \times 2 = 14$; therefore, $14 \div 7 = 2$. Marcellus performs 2 oil changes each hour.

15. B. $18 \div 3 = 6$ because $6 \times 3 = 18$.

16. B. $6 \times 6 = 36$; therefore, $36 \div 6 = 6$. Keiko spends 6 minutes on each topic.

17. D. $7 \times 4 = 28$; therefore, $28 \div 7 = 4$. Winona does 4 push-ups in each set.

18. C. $3 \times 7 = 21$; therefore, $21 \div 3 = 7$. Each table seats 7 people.

19. B. $63 \div 9 = 7$ because $9 \times 7 = 63$.

20. C. $3 \times 8 = 24$; therefore, $24 \div 3 = 8$.