ESTAR
INTERVENTION

Tier 2 Mathematics Intervention

Module: *Multiplication & Division Fact Strategies (MDFS)*

Form A Assessment

Name _____

Date _____

Teacher _____

The Meadows Center for Preventing Educational Risk—Mathematics Institute
The University of Texas at Austin

1.) Jay has 5 packages of collectors cards. Each package has 5 cards. How many total collectors cards does Jay have?

A 15 cards
B 25 cards
C 30 cards
D 1 card

2.) Selena has 3 packs of gum. Each pack of gum has 6 pieces inside. How many pieces of gum does Selena have?

A 18 **B** 9 **C** 3 **D** 24

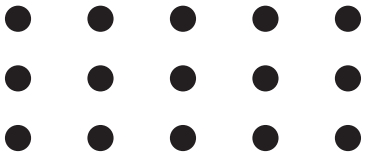
3.) ____ × 3 = 24

A 6
B 21
C 8
D 9

4.) ____ + ____ + ____ = 21

A 5 + 5 + 5
B 7 + 7 + 7
C 9 + 9 + 9
D 6 + 6 + 6

5.) Which multiplication equation represents this arrangement?

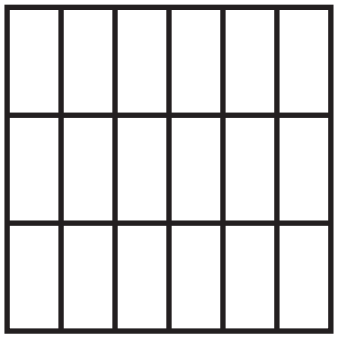


A 2 × 3
B 3 × 4
C 4 × 4
D 3 × 5

6.) Tomas plants 7 rows of tomato plants with 3 plants in each row. How many tomato plants does he have all together?

A 24 **B** 10 **C** 4 **D** 21

7.) Which repeated addition equation represents the equal groups model?



A 6 + 6 + 6

B 3 + 3 + 3

C 4 + 4 + 4 + 4 + 4 + 4

D 5 + 5 + 5

8.) There are 30 books on the floor in Dominic's room. His bookcase has 5 shelves. How many books will be on each shelf if he puts an equal number per shelf?

A 5 books per shelf

B 6 books per shelf

C 4 books per shelf

D 15 books per shelf

9.) There are 18 pieces of candy left in the bowl. Erin is fair, she will give herself and her 2 friends the same number of pieces. How many pieces does each person get if all 18 pieces are divided evenly?

A $18 \div 3 = 6$
$6 \times 3 = 18$

B $18 \div 2 = 9$
$9 \times 2 = 12$

C $3 \div 18 = 6$
$6 \times 18 = 3$

D $18 \div 3 = 7$
$7 \times 3 = 18$

10.) There are 5 boxes. Each box has 6 toys. How many toys in all?

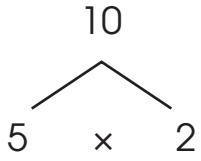
A 11
B 30
C 35
D 2

11.) There are 7 bags. Each bag has 4 potatoes. How many potatoes are there in all?

A 11
B 3
C 28
D 21

12.) Which is a correct way to break apart 10?

A



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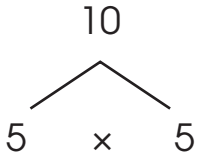

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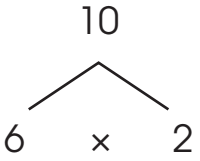

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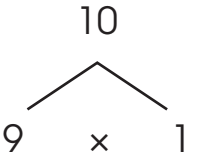


13.) Which equation does not belong to the number family, 4, 9, and 36?

A $4 \times 9 = 36$

B $36 \div 9 = 4$

C $9 \div 4 = 2$

D $9 \times 4 = 36$

14.) 9 girls sold 8 tickets for the school musical. How many tickets were sold altogether?

A 72

B 17

C 27

D 54

15.) Joe is figuring out the area of the wall in his room. It is 6 feet wide and 5 feet tall. Choose the correct way she can solve this unknown problem.

A

$6 + 5$

$(1 + 5) + (5 + 5)$

$6 + 10 = 16$

B

3×6

$3 \times (3 + 3)$

$(3 \times 3) + (3 \times 3)$

$9 + 9 = 18$

C

6×5

$(1 + 5) \times 5$

$(1 \times 5) + (5 \times 5)$

$5 + 25 = 30$

D

5×6

$5 \times (1 + 5)$

$1 \times 5 \times 5$

$1 + 25 = 25$

16.) 4 girls sold 9 boxes of cookies each for a school fundraiser. How many boxes were sold in all?

A 36

B 13

C 27

D 5

17.) Colin is painting a wall that is 5 feet tall and 8 feet wide. Which expression can be used to find the area of the wall?

A 8 + 5
B 5 + 5
C 8 × 5
D 8 × 8

Use the Break Apart Strategy for 6s to solve the problem.

18.) The candy store is open 6 days a week for 9 hours each day. How many hours is the candy store open in one week?

_____ hours

A 15 **B** 3 **C** 54 **D** 27

Use the Break Apart Strategy for 7s to solve the problem.

19.) John gets paid $7 for every lawn he mows. In the month of June, he mowed 7 lawns. How much money did John make in June?

$ _____ in June

A 49 **B** 30 **C** 12 **D** 2

20.) There are 5 cars. Each car holds 7 people. How many total people can 5 cars hold? Use the Break Apart Strategy for 7s to solve.

A 10
B 21
C 28
D 35

21.) What strategy is the most efficient to solve 9 × 3?

A Make 10 subtract the factor
B Break-apart
C Count by
D Repeated addition

22.) On the math test Jill was solving 7 × 8. She remembered to break apart 7 into 2 and 5 but then got stuck. What is Nancy's next step?

A multiply 7 × 2 and 8 × 5
B multiply 2 × 8 and 5 × 8
C add 2 + 5
D add 8 + 2 plus 5

23.) A 1-year-old dog will have doubled in length since the time of birth. If a dog is born 6 inches long, by 4 years, how long will the dog be?

Choose the answer that shows the length of the dog in 4 years.

A 1 inches
B 24 inches
C 12 inches
D 21 inches

24.) $27 \times 2 =$ _____

A 54
B 29
C 47
D 56

25.) To find the volume of a box, multiply the length times the width times the height. What is the volume of a box that is 4 cm in length, 2 cm in width, and 5 cm in height? Choose the answer that finds the volume of the box.

A $(4 \times 2) \times 5$

8×5

$40\ cm^3$

B $(4 \times 2) + 5$

$8 + 7$

$15\ cm^3$

C $(4 \times 2) - 5$

$8 - 5$

$3\ cm^3$

D $(4 \times 2) + 5$

$8 + 5$

$13\ cm^3$

26.) $5 \times 4 \times 3 =$ _____

A 12
B 17
C 23
D 60

27.) Kevin has 4 times more pencils than pens. If he has 6 pens, how many pencils does he have?

A 4 pencils
B 6 pencils
C 24 pencils
D 32 pencils

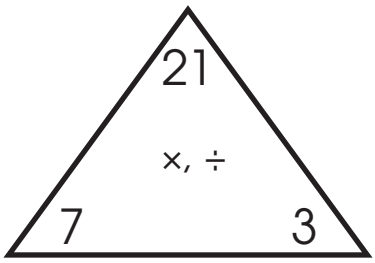
28.) Kim has 3 times more baseball cards than basketball cards. If she has 6 basketball cards, how many baseball cards does she have?

A 9 **B** 18 **C** 12 **D** 3

29.) Which is the missing factor in ____ × 8 = 40

A 5
B 3
C 6
D 12

30.) Which set of facts go with the number family?



A $7 \times 2 = 21$
$21 \times 7 = 3$
$21 \div 7 = 3$
$21 \div 3 = 7$

B $7 \times 3 = 21$
$3 \times 7 = 21$
$21 \div 7 = 3$
$21 \div 3 = 7$

C $21 \times 7 = 3$
$7 \times 3 = 21$
$21 \div 7 = 3$
$21 \div 3 = 7$

D $3 \times 21 = 7$
$21 \times 3 = 7$
$21 \div 7 = 3$
$3 \div 7 = 21$

31.) Think multiplication to solve for division.

$32 \div 8 =$_____

A 3
B 40
C 4
D 5

32.) At track camp the campers have to run 5 laps around the field in the morning and 4 laps around the field in the afternoon. How many laps in total do campers run after 5 days at camp?

A 45 laps
B 40 laps
C 9 laps
D 25 laps

33.) $20 \div 5 = n$

$n =$ _____

A 3
B 4
C 25
D 30

Choose the correct division and multiplication with missing factor problem.

34.) Steve is making gift baskets. He has 120 chocolate bars and 6 baskets. If each basket has an equal number of chocolate bars, how many chocolate bars will he place in each basket?

A $120 \div n = 6$
$n \times 120 = 6$

B $120 \div 6 = n$
$6 \times n = 120$

C $6 \div 120 = n$
$n \times 6 = 120$

D $n \div 120 = 6$
$6 \times 120 = n$

35.) A farmer has 3 horses and 5 pigs. He has 3 times as many roosters as horses. How many roosters does the farmer have?

A 15 **B** 9 **C** 8 **D** 6

36.) There are triple the amount of girls on the track team than boys. If there are 9 boys on the track team, how many girls are there?

A 12 **B** 36 **C** 6 **D** 27

37.) It took 3 weeks to make the pool in Tom's background. Tom worked 4 days a week on the pool. He spends 5 hours a day working. How many days altogether did Tom work on his pool? Choose the correct equation for the problem.

A 4 × 3 = 12 days

B 5 × 3 × 4 = 60 days

C 5 × 3 = 15 days

D 5 × 4 = 20 days

38.) Julie did 5 math problems for homework on Monday. Then she did 4 times as many problems on Tuesday than Monday. How many problems did she do on Tuesday?

A 4 **B** 20 **C** 5 **D** 9

39.) Jose and three friends bought a pizza for $12. If each friend paid the same amount, how much did each friend pay?

A 12 **C** 3

B 5 **D** 7

40.) Vanessa did 3 pages of homework each night. She did $\frac{1}{4}$ of her homework on Monday. How many pages of homework did she do by Friday?

A 3
B 9
C 12
D 7