

Tier 2 Mathematics Intervention

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

Form C Assessment

Name _____

Date _____

Teacher _____

1.) Jay has 5 packages of collectors cards. Each package has 3 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 8 pieces inside. How many pieces of gum does Selena have?

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

3.) $\underline{\quad} \times 3 = 9$

- A 6
- B 21
- C 8
- D 9

4.) $\underline{\quad} + \underline{\quad} + \underline{\quad} = 21$

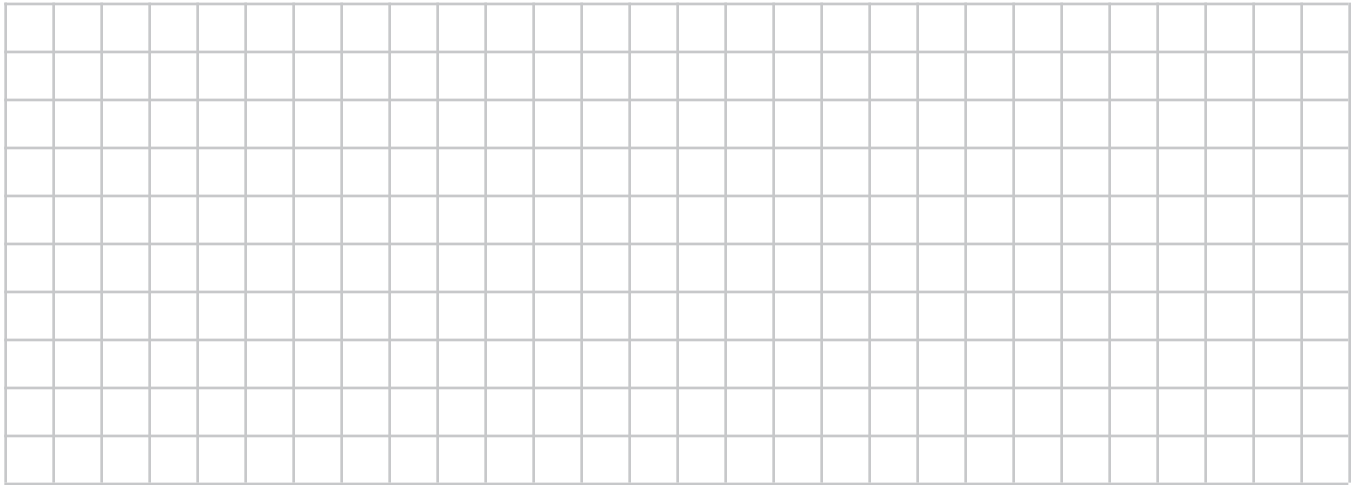
- A $5 + 5 + 5$
- B $7 + 7 + 7$
- C $9 + 9 + 9$
- D $6 + 6 + 6$

5.) Which multiplication equation represents this arrangement?



- A 2×3
- B 3×4
- C 4×4
- D 3×6

6.) Tomas plants 8 rows of tomato plants with 3 plants in each row. How many tomato plants does he have all together?



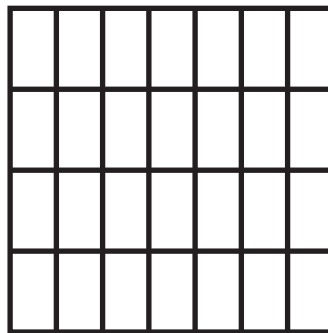
A 24

B 10

C 4

D 21

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



A $7 + 7 + 7 + 7$

C $4 + 4 + 4 + 4 + 4 + 4$

B $3 + 3 + 3$

D $5 + 5 + 5$

8.) There are 30 books on the floor in Dominic’s room. His bookcase has 3 shelves. How many books will be on each shelf if he puts an equal number per shelf?

A 5 books per shelf

B 10 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 5 friends the same number of pieces. How many pieces does each person get if all 18 pieces are divided evenly?

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

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

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

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

10.) There are 7 boxes. Each box has 6 toys. How many toys in all?

A 11

B 42

C 35

D 2

11.) There are 7 bags. Each bag has 3 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 14?

A

$$\begin{array}{c} 14 \\ \diagdown \quad \diagup \\ 7 \quad \times \quad 2 \end{array}$$

C

$$\begin{array}{c} 14 \\ \diagdown \quad \diagup \\ 7 \quad \times \quad 7 \end{array}$$

B

$$\begin{array}{c} 14 \\ \diagdown \quad \diagup \\ 10 \quad \times \quad 4 \end{array}$$

D

$$\begin{array}{c} 14 \\ \diagdown \quad \diagup \\ 13 \quad \times \quad 1 \end{array}$$

13.) Which equation does not belong to the number family, 2, 11, and 22?

A $2 \times 11 = 22$

C $22 \div 11 = 2$

B $11 \div 2 = 22$

D $11 \times 2 = 22$

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

A 81

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 7 feet tall. Choose the correct way she can solve this unknown problem.

A $6 + 7$

C 6×7

$(1 + 7) + (7 + 7)$

$(1 + 5) \times 7$

$8 + 14 = 22$

$(1 \times 7) + (5 \times 7)$

$7 + 35 = 42$

B 3×6

D 5×7

$3 \times (3 + 3)$

$5 \times (1 + 6)$

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

$1 \times 5 \times 6$

$9 + 9 = 18$

$1 + 30 = 31$

16.) 4 girls sold 10 boxes of cookies each for a school fundraiser. How many boxes were sold in all?

A 40

B 15

C 27

D 8



17.) Colin is painting a wall that is 5 feet tall and 9 feet wide. Which expression can be used to find the area of the wall?

- A** $9 + 5$
- B** $5 + 5$
- C** 9×5
- D** 9×9

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

18.) The candy store is open 6 days a week for 7 hours each day. How many hours is the candy store open in one week?

_____ hours

- A** 15
- B** 13
- C** 42
- 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 8 lawns. How much money did John make in June?

\$ _____ in June

- A** 56
- B** 15
- C** 12
- D** 2



- 20.)** There are 7 cars. Each car holds 4 people. How many total people can 7 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 9×4 ?
- A** Make 10 subtract the factor
 - B** Break-apart
 - C** Count by
 - D** Repeated addition
- 22.)** On the math test Jill was solving 7×9 . 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 2×9
and 5×9
 - 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 6 years, how long will the dog be?

Choose the answer that shows the length of the dog in 6 years.

- A** 1 inches
- B** 36 inches
- C** 12 inches
- D** 21 inches

24.) $30 \times 2 =$ _____

- A 60
- B 29
- C 47
- D 32

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 5 cm in length, 2 cm in width, and 5 cm in height? Choose the answer that finds the volume of the box.

A $(5 \times 2) \times 5$
 $\quad \quad \quad \vee$
 $\quad \quad \quad 10 \times 5$
 $\quad \quad \quad \quad \quad \quad \vee$
 $\quad \quad \quad \quad \quad \quad 50 \text{ cm}^3$

C $(5 \times 2) - 5$
 $\quad \quad \quad \vee$
 $\quad \quad \quad 10 - 5$
 $\quad \quad \quad \quad \quad \quad \vee$
 $\quad \quad \quad \quad \quad \quad 5 \text{ cm}^3$

B $(5 \times 2) + 5$
 $\quad \quad \quad \vee$
 $\quad \quad \quad 10 + 5$
 $\quad \quad \quad \quad \quad \quad \vee$
 $\quad \quad \quad \quad \quad \quad 15 \text{ cm}^3$

D $(5 \times 2) + 5$
 $\quad \quad \quad \vee$
 $\quad \quad \quad 10 + 2$
 $\quad \quad \quad \quad \quad \quad \vee$
 $\quad \quad \quad \quad \quad \quad 12 \text{ cm}^3$

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

- A 12
- B 17
- C 23
- D 60

27.) Kevin has 4 times more pencils than pens. If he has 8 pens, how many pencils does he have?

- A 4 pencils
- B 12 pencils
- C 24 pencils
- D 32 pencils

28.) Kim has 3 times more baseball cards than basketball cards. If she has 4 basketball cards, how many baseball cards does she have?

A 9

B 18

C 12

D 3

29.) Which is the missing factor in $\underline{\quad} \times 8 = 48$

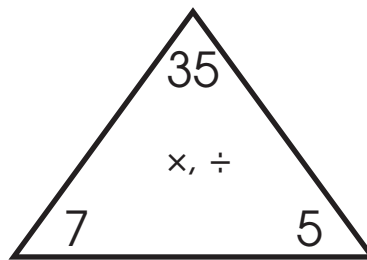
A 5

B 3

C 6

D 12

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



A $7 \times 5 = 35$

$5 \times 7 = 35$

$35 \div 7 = 5$

$35 \div 5 = 7$

B $5 \times 7 = 35$

$7 \times 5 = 35$

$7 \div 5 = 35$

$5 \div 7 = 35$

C $35 \times 7 = 5$

$35 \times 5 = 7$

$35 \div 7 = 5$

$35 \div 5 = 7$

D $5 \times 35 = 7$

$35 \times 7 = 5$

$35 \div 7 = 5$

$35 \div 5 = 7$

31.) Think multiplication to solve for division.

$$32 \div 4 = \underline{\quad}$$

A 3

B 40

C 8

D 5

32.) At track camp the campers have to run 6 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** 50 laps
- C** 9 laps
- D** 25 laps

33.) $15 \div 5 = n$

$$n = \underline{\hspace{2cm}}$$

- 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 5 baskets. If each basket has an equal number of chocolate bars, how many chocolate bars will he place in each basket?

- | | |
|---|---|
| A $120 \div n = 5$
$n \times 120 = 5$ | C $5 \div 120 = n$
$n \times 5 = 120$ |
| B $120 \div 5 = n$
$5 \times n = 120$ | D $n \div 120 = 5$
$5 \times 120 = n$ |

35.) A farmer has 3 horses and 5 pigs. He has 7 times as many roosters as horses. How many roosters does the farmer have?

- A** 10 **B** 21 **C** 4 **D** 15

36.) There are triple the amount of girls on the track team than boys. If there are 6 boys on the track team, how many girls are there?

- A** 9 **B** 36 **C** 6 **D** 18

- 37.)** It took 3 weeks to make the pool in Tom’s backyard. Tom worked 5 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** $5 \times 3 = 15$ days
B $5 \times 3 \times 4 = 75$ days
C $6 \times 3 = 18$ days
D $5 \times 5 = 25$ days

- 38.)** Julie did 8 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** 12 **C** 32 **D** 9

- 39.)** Jose and three friends bought a pizza for \$20. If each friend paid the same amount, how much did each friend pay?

- A** 12 **C** 3
B 5 **D** 7

- 40.) Vanessa did 9 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 36
- C 12
- D 7