

Tier 2 Mathematics Intervention

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

Form B Assessment

Name _____

Date _____

Teacher _____

1.) Jay has 5 packages of collectors cards. Each package has 4 cards. How many total collectors cards does Jay have?

- A 9 cards
- B 20 cards
- C 25 cards
- D 5 cards

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

- A 12
- B 8
- C 6
- D 18

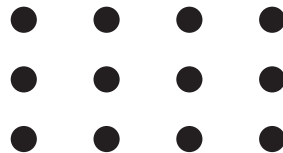
3.) $8 \times \underline{\quad} = 24$

- A 6
- B 16
- C 3
- D 9

4.) $\underline{\quad} + \underline{\quad} + \underline{\quad} = 18$

- A $5 + 5 + 5$
- B $6 + 6 + 6$
- C $9 + 9 + 1$
- D $3 + 3 + 3$

5.) Which multiplication equation represents this arrangement?



- A 2×3
- B 3×4
- C 3×3
- D 5×5

- 6.) Tomas plants 9 rows of tomato plants with 3 plants in each row. How many tomato plants does he have all together?

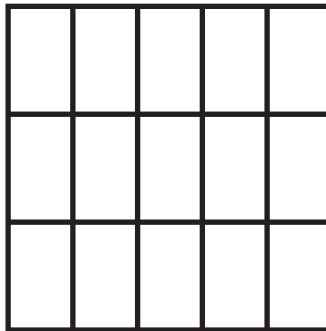
A 27

B 12

C 9

D 24

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



A $5 + 5 + 5 + 5 + 5$

B $3 + 3 + 3$

C $1 + 1 + 1$

D $5 + 5 + 5$

- 8.) There are 35 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 30 books per shelf

B 7 books per shelf

C 6 books per shelf

D 40 books per shelf

9.) There are 21 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 21 pieces are divided evenly?

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

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

B $21 \div 2 = 11$
 $11 \times 2 = 22$

D $21 \div 3 = 6$
 $6 \times 3 = 21$

10.) There are 5 boxes. Each box has 3 toys. How many toys in all?

A 8

B 15

C 20

D 9

11.) There are 8 bags. Each bag has 4 potatoes. How many potatoes are there in all?

A 12

B 8

C 32

D 28

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

A

$$\begin{array}{c} 12 \\ \diagdown \quad \diagup \\ 6 \quad \times \quad 2 \end{array}$$

C

$$\begin{array}{c} 12 \\ \diagdown \quad \diagup \\ 7 \quad \times \quad 5 \end{array}$$

B

$$\begin{array}{c} 12 \\ \diagdown \quad \diagup \\ 3 \quad \times \quad 3 \end{array}$$

D

$$\begin{array}{c} 12 \\ \diagdown \quad \diagup \\ 1 \quad \times \quad 11 \end{array}$$

13.) Which equation does not belong to the number family 7, 9, 63?

A $9 \times 7 = 63$

C $7 \div 63 = 9$

B $7 \times 9 = 63$

D $63 \div 9 = 7$

14.) 6 girls sold 9 tickets for the school musical. How many tickets were sold altogether?

A 45

B 15

C 48

D 54

15.) Joe is figuring out the area of the wall in his room. It is 4 feet wide and 6 feet tall. Choose the correct way she can solve this unknown problem.

A $6 + 4$
 $(1 + 5) + (4 + 4)$
 $6 + 8 = 14$

C 6×4
 $(1 + 5) \times 4$
 $(1 \times 4) + (5 \times 4)$
 $4 + 20 = 24$

B 4×6
 $3 \times (3 + 3)$
 $(3 \times 3) + (3 \times 3)$
 $9 + 9 = 18$

D 4×6
 $4 \times (1 + 5)$
 $4 \times 5 \times 5$
 $4 + 25 = 29$

16.) 8 girls sold 9 boxes of cookies each for a school fundraiser. How many boxes were sold in all?

A 72

B 17

C 90

D 80



17.) Colin is painting a wall that is 6 feet tall and 8 feet wide. Which expression can be used to find the area of the wall?

- A $6 + 8$
- B $8 \times 8 \times 8 \times 8 \times 8 \times 8$
- C 6×8
- 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 4 hours each day. How many hours is the candy store open in one week?

_____ hours

- A 15
- B 30
- C 10
- D 24

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 5 lawns. How much money did John make in June?

\$ _____ in June

- A 42
- B 13
- C 15
- D 35



- 20.)** There are 7 cars. Each car holds 3 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 8×9 ?
- A** Break-apart
 - B** Count by
 - C** Repeated addition
 - D** Make 10 subtract the factor
- 22.)** On the math test Jill was solving 7×7 . 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 7×5
 - B** multiply 2×5
and 5×7
 - C** add $2 + 5$
 - D** add $7 + 2$
multiply by 5
- 23.)** A 1-year-old dog will have doubled in length since the time of birth. If a dog is born 10 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** 14 inches
- B** 40 inches
- C** 20 inches
- D** 4 inches

24.) $2 \times 36 = \underline{\hspace{2cm}}$

- A 62
- B 72
- C 60
- D 16

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 3 cm in length, 2 cm in width, and 4 cm in height? Choose the answer that finds the volume of the box.

A $(3 \times 2) \times 4$
 $\swarrow \searrow$
 6×4
 $\swarrow \searrow$
 24 cm^3

C $(3 \times 2) - 4$
 $\swarrow \searrow$
 $6 - 4$
 $\swarrow \searrow$
 2 cm^3

B $(3 \times 2) + 4$
 $\swarrow \searrow$
 $6 + 6$
 $\swarrow \searrow$
 12 cm^3

D $(3 \times 2) + 4$
 $\swarrow \searrow$
 $6 + 4$
 $\swarrow \searrow$
 10 cm^3

26.) $5 \times 4 \times 2 = \underline{\hspace{2cm}}$

- A 11
- B 17
- C 23
- D 40

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

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

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

A 10

B 8

C 16

D 12

29.) Which is the missing factor in $\underline{\quad} \times 9 = 36$

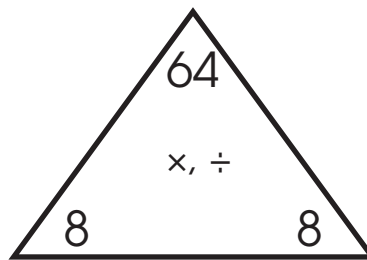
A 4

B 3

C 6

D 12

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



A $8 + 8 = 64$

$8 \div 8 = 64$

B $8 \times 8 = 64$

$64 \div 8 = 8$

C $64 \times 8 = 8$

$8 \div 64 = 8$

D $8 \times 64 = 8$

$64 \div 8 = 8$

31.) Think multiplication to solve for division.

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

A 28

B 40

C 8

D 9

32.) At track camp the campers have to run 6 laps around the field in the morning and 2 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.) $12 \div 3 = n$

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

- 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 130 chocolate bars and 4 baskets. If each basket has an equal number of chocolate bars, how many chocolate bars will he place in each basket?

- | | |
|---|---|
| A $130 \div n = 4$
$n \times 130 = 4$ | C $4 \div 130 = n$
$n \times 4 = 130$ |
| B $130 \div 4 = n$
$4 \times n = 130$ | D $n \div 130 = 4$
$4 \times 130 = n$ |

35.) A farmer has 4 horses and 5 pigs. He has 4 times as many roosters as horses. How many roosters does the farmer have?

- A** 16
- B** 8
- C** 20
- D** 13

36.) There are double 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** 11
- B** 27
- C** 14
- D** 18

- 37.)** It took 4 weeks to make the pool in Tom’s backyard. Tom worked 5 days a week on the pool. He spends 8 hours a day working. How many days altogether did Tom work on his pool? Choose the correct equation for the problem.

- A** $5 \times 4 = 20$ days
B $4 \times 5 \times 8 = 160$ days
C $4 \times 8 = 32$ days
D $8 \times 5 = 40$ days

- 38.)** Julie did 6 math problems for homework on Monday. Then she did 7 times as many problems on Tuesday than Monday. How many problems did she do on Tuesday?

- A** 13 **B** 7 **C** 42 **D** 49

- 39.)** Jose and two friends bought a pizza for \$27. If each friend paid the same amount, how much did each friend pay?

- A** 29 **C** 3
B 9 **D** 30

- 40.) Vanessa did 5 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 15
- B 20
- C 25
- D 10