

MID-TOPIC CHECKPOINT

TOPIC
3

Name: _____

1. **Vocabulary** Describe the relationship between the base and the exponent in 4^3 . *Lesson 3-1*

In 2–5, select **True** or **False** to describe each statement. *Lesson 3-2*

- | | True | False |
|-------------------------------|--------------------------|--------------------------|
| 2. The GCF of 12 and 28 is 4. | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The GCF of 18 and 84 is 9. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. The LCM of 12 and 6 is 6. | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. The LCM of 4 and 8 is 8. | <input type="checkbox"/> | <input type="checkbox"/> |

6. Draw a line to match each numerical expression on the left with an equivalent number on the right. *Lesson 3-3*

$0.5^2 \times (20 - 2^2 \times 3) \times \left(\frac{2}{5} \times 25\right)$ 18

$2[(14 - 3) + 4^3 \div 4] - 2.5 \times 12$ 20

$9 + 12 \div \frac{2}{3} - 3^3 \div 3$ 24

7. Which expressions are equal to $\left(\frac{2}{3}\right)^2$? Select all that apply. *Lesson 3-1*

- $\frac{4}{9}$
 $\frac{4}{3}$
 $\frac{1}{3} \times \frac{1}{3}$
 $\frac{1}{9} \times 4$
 $\frac{2}{3} \times \frac{2}{3}$

8. Liam bought 2 vintage movie posters, 2 rock posters, and 1 rap poster. He applied a \$35 gift card to the total purchase and a $\frac{1}{2}$ -off coupon to the rap poster. Write and evaluate a numerical expression to show how much Liam paid for the posters. *Lesson 3-3*

Poster Prices	
Vintage Movie	\$28.50
B Movie	\$18.25
Rock	\$29.75
Rap	\$19.50

9. Eva and Jin are new volunteers at the animal shelter. If they both volunteer on the first day of the month, in how many days will they volunteer on the same day again? *Lesson 3-2*

Animal Shelter Volunteers	
Eva	Every 3 days
Jin	Every 5 days

How well did you do on the mid-topic checkpoint? Fill in the stars.



MID-TOPIC PERFORMANCE TASK

Monique and Raoul are helping teachers make gift bags and gather supplies for a student celebration day at Pineville Middle School.

PART A

Raoul has 72 wristbands and 96 movie passes to put in gift bags. The greatest common factor for the number of wristbands and the number of movie passes is equal to the number of gift bags Raoul needs to make. Find the number of gift bags Raoul needs to make. Then find how many wristbands and how many movie passes Raoul can put in each gift bag if he evenly distributes the items.

PART B

Monique wants to have an equal number of cups and napkins. What is the least number of packages of cups and the least number of packages of napkins Monique should buy to have an equal number of cups and napkins? Justify your answer.

Big Sale!

Cups	\$3.50	12 per package
Napkins	\$4.25	10 per package

PART C

Which numerical expressions show the equal number of both cups and napkins that Monique will have in Part B? Select all that apply.

$2^1 \times 30$

$10^2 \times 60$

$2^2 \times 15$

460^0

$4^0 \times 60$

PART D

The teachers have \$25 to buy supplies. Write and evaluate a numerical expression to show how much more money they will need to buy the cups and napkins.

