



Level 1: Multiplication and Division Algorithms Posttest

Question 1:

Paul and Lauren each put money into a savings account each month.

Month	Paul's Account	Lauren's Account
September	\$10	\$20
October	\$15	\$30
November	\$20	\$40
December	\$25	\$50

The pattern of savings continues for two years.

Given the amount in Paul's savings account after two years, how can you find the amount in Lauren's savings account?

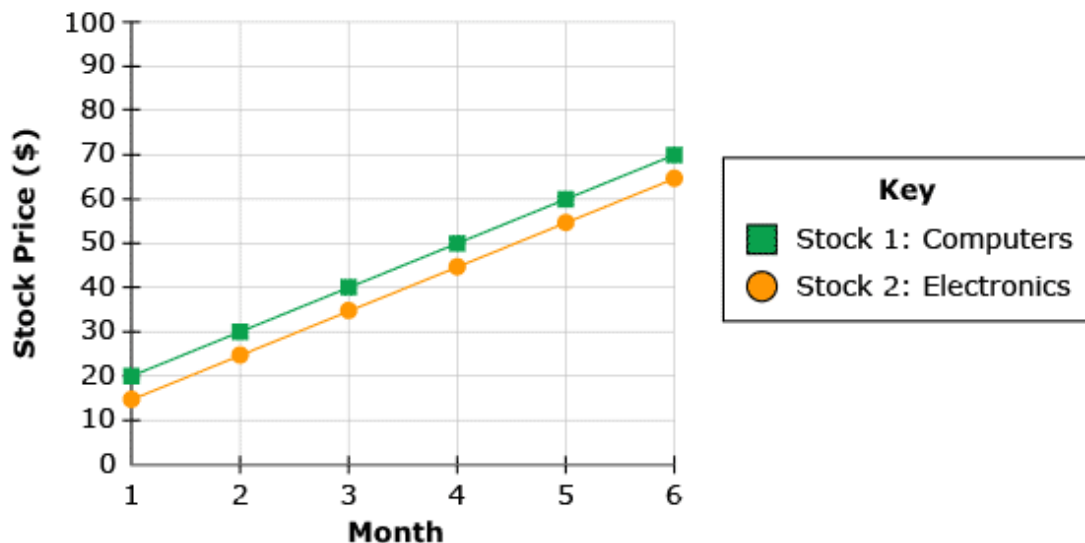
- a. Multiply by 2.
- b. Multiply by 5.
- c. Add 10.
- d. Add 25.

Continue ➡



Question 2:

A financial advisor uses this graph to study the prices of two different stocks.



Which statement is true about the pattern of stock prices for computers and electronics?

- a. Within the same month, the price of computer stock was always \$5 more than electronic stock.
- b. Each month, the price of computer stock increased by \$20 and electronic stock increased by \$15.
- c. The price of computer stock increased more each month than the price of electronic stock.
- d. To find the price increase from one month to the next, multiply by 10.

Continue ➡



Question 3:

The table compares monthly electricity cost for light bulbs. If the monthly bill is \$20 using 60-watt bulbs, the bill will be \$16.50 using 40-watt bulbs.

Monthly Electricity Cost

60-watt bulbs	40-watt bulbs
\$20	\$16.50
\$22	\$18.50
\$24	\$20.50
\$26	\$22.50
\$28	\$24.50

Based on this pattern, if the monthly cost to use 60-watt bulbs is \$110, how much does it cost to use 40-watt bulbs?

\$

Question 4:

The table shows the cost to buy bolts.

Number of Bolts	Cost
5	\$0.50
10	\$1.00
15	\$1.50
20	\$2.00
25	\$2.50

Which rule can be used to find the cost to buy bolts?

- a. $\text{cost} = \text{number of bolts} \times \10
- b. $\text{cost} = \text{number of bolts} + \0.10
- c. $\text{cost} = \text{number of bolts} \times \0.10
- d. $\text{cost} = \text{number of bolts} + \10

Continue ➡



Question 5:

Evaluate these four expressions. Which expression has the largest value?

- a. $(3 \times 100 \div 25) \times 5 - 2$
- b. $(3 \times 100) \div [25 \times (5 - 2)]$
- c. $[(3 \times 100) \div (25 \times 5)] - 2$
- d. $3 \times \{[(100 \div 25) \times 5] - 2\}$

Question 6:

Evaluate this expression.

$$\{48 \div [2 \times (1\frac{1}{2} + 2\frac{1}{2})]\} + 100 = \boxed{}$$

Question 7:

Mr. Brown has 27 students in his class. He gives each student 35 stickers.

What is the total number of stickers Mr. Brown gives to the class?

- a. 216
- b. 715
- c. 925
- d. 945

Question 8:

A space shuttle in orbit travels 28,500 kilometers per hour.

At that speed, how many kilometers can the space shuttle travel in 24 hours?

- a. 171,000
- b. 542,000
- c. 554,000
- d. 684,000

Continue ➡



Question 9:

A leaking faucet lost 581 gallons of water in 1 week. The faucet lost the same amount of water each day.

How many gallons of water did the faucet lose each day? (1 week = 7 days)

- a. 73
- b. 80
- c. 82
- d. 83

Question 10:

This table shows the wingspans of two butterflies.

Butterfly	Wingspan (in centimeters)
Monarch	10.50
Viceroy	7.25

How many centimeters wider is the wingspan of the monarch butterfly than the wingspan of the viceroy butterfly?

- a. 2.80
- b. 3.25
- c. 3.35
- d. 6.20



Question 11:

Jamal ran 4.8 kilometers on Saturday and 3.25 kilometers on Sunday.

How many kilometers did Jamal run on the two days combined?

- a. 3.73 kilometers
- b. 7.05 kilometers
- c. 7.33 kilometers
- d. 8.05 kilometers

Question 12:

There are 360 students going on a field trip. The same number of students should be on each of 10 buses.

How many students should be on each bus?

- a. 26 students
- b. 30 students
- c. 36 students
- d. 40 students

Question 13:

There are 360 students going on a field trip. The same number of students should be on each of 10 buses.

How many students should be on each bus?

- a. 26 students
- b. 30 students
- c. 36 students
- d. 40 students

Continue ➡



Question 14:

Dillon adds 2 and 3, then multiplies the sum by 7.

Which expression represents Dillon's calculations?

- a. $2 + 3 \times 7$
- b. $2 \times 3 + 7$
- c. $7 + (2 + 3)$
- d. $7 \times (2 + 3)$

Question 15:

Mason added 12 and 4, then divided the sum by 2.

Which expression represents Mason's calculations?

- a. $(12 + 4) \div 2$
- b. $12 \div (4 + 2)$
- c. $12 + 4 \div 2$
- d. $12 \div 4 + 2$

Question 16:

Look at the expression below.

$$5 \times (4 - 3)$$

Which calculations are represented by the expression?

- a. Subtract 3 from 4, then multiply by 5.
- b. Subtract 4 from 3, then multiply by 5.
- c. Multiply 3 by 5, then subtract 4.
- d. Multiply 5 by 4, then subtract 3.



Question 17:

The first five numbers of two patterns are listed below.

Pattern L: 6, 11, 16, 21, 26

Pattern M: 18, 23, 28, 33, 38

The 30th number of Pattern L is 151.

Which expression could be used to find the 30th number of Pattern M?

- a. 151×3
- b. $151 + 5$
- c. $151 + 12$
- d. 151×18

Question 18:

The first five numbers in Rachel's and Nicole's number patterns are shown below.

Rachel's pattern: 0, 2, 4, 6, 8

Nicole's pattern: 0, 4, 8, 12, 16

The 20th number in Rachel's pattern is 38.

What is the 20th number in Nicole's pattern?

- a. 40
- b. 42
- c. 58
- d. 76



Question 19:

A company ships 26 refrigerators in a truck. Each refrigerator weighs 309 pounds.

What is the total weight of the refrigerators in the truck?

- a. 2,472 pounds
- b. 7,884 pounds
- c. 8,034 pounds
- d. 8,294 pounds

Question 20:

A train travels between Washington, D.C., and Boston 16 times each week. Each trip is 457 miles.

What is the total distance the train travels each week?

- a. 3,199 miles
- b. 6,972 miles
- c. 7,012 miles
- d. 7,312 miles

Question 21:

The area of a playground is 1800 square feet. The playground is 50 feet long.

How wide is the playground in feet?

- a. 30
- b. 36
- c. 306
- d. 360

Continue ➡



Question 22:

Kendra swam a total of 423.5 meters in 7 days. She swam the same distance each day.

How far did Kendra swim each day?

- a. 60.5 meters
- b. 63.0 meters
- c. 63.5 meters
- d. 65.0 meters

Question 23:

Tom earns \$1,020 a week at his job. What is the total amount Tom earns at his job in 2 years? [1 year = 52 weeks]

\$

Question 24:

Meghan has 288 stamps in her collection. She puts 24 stamps on each page of an album.

How many pages does Meghan fill in her album?

pages