

Math Links Posttest: The Sports Network

Answer questions 1–25 by circling the letter of your answer choice.

Review of Basic Skills

- The office manager ordered 1,248 plain notebooks and 2,764 lined notebooks. How many notebooks did he order?
A. 1,516
B. 1,524
 C. 4,012
D. 34,494
(ML 1: Addition)
- Find the difference: $6,204 - 4,395 =$
 A. 1,809
B. 2,191
C. 2,919
D. 10,599
(ML 2: Subtraction)
- The office supply store charges a handling fee of \$15 on each order. What is the total handling charge on 147 orders?
A. \$9.80
B. \$162.00
C. \$882.00
 D. \$2,205.00
(ML 3: Multiplication)
- Solve: $12,270 \div 15 =$
 A. 818
B. 1,218
C. 12,285
D. 184,050
(ML 4: Division)
- Each of the 17 employees at a company has a printer. The total value of the printers is \$4,233. Which is the best operation to use to find the value of each printer?
A. addition
B. subtraction
C. multiplication
 D. division
(ML 5: Problem Solving)

SCORE

Review of Basic Skills

(ML 1–5)

/ 5

Numbers and Operations

6. What is $\frac{3}{4}$ of 28?

- A. 7
- B. 21
- C. 28
- D. 75

(ML 6: Fractions)

7. Solve: $0.22 \times \$125.50 =$

- A. \$27.61
- B. \$125.72
- C. \$276.10
- D. \$2,761.00

(ML 7: Decimals)

8. 12 is what percent of 150?

- A. 0.08%
- B. 0.8%
- C. 8%
- D. 12.5%

(ML 8: Percents)

9. A company pays $\frac{3}{5}$ of its budget in salaries. What percent of the budget is paid in salaries?

- A. 0.6%
- B. 1.6%
- C. 30%
- D. 60%

(ML 9: Equivalent Forms)

10. Erika's annual salary is \$27,325. If she gets a $\frac{1}{25}$ increase, what will the increase be in dollars?

- A. \$10.93
- B. \$1,093.00
- C. \$10,930.00
- D. \$27,325.04

(ML 10: Problem Solving)

SCORE

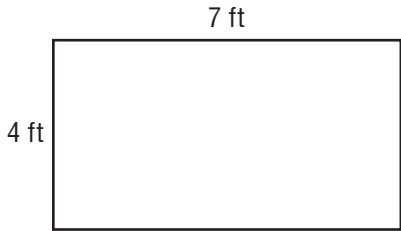
Numbers and Operations

(ML 6–10)

/ 5

Geometry and Measurement

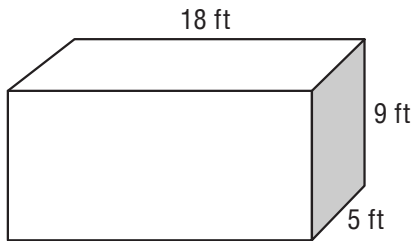
11. This figure represents a countertop.
What is the area of the countertop?



- A. 11 square feet
- B. 22 square feet
- C. 28 square feet
- D. 49 square feet

(ML 11: Perimeter and Area)

12. Calculate the volume of this rectangular prism.



- A. 32 cubic feet
- B. 297 cubic feet
- C. 594 cubic feet
- D. 810 cubic feet

(ML 9: Equivalent Forms)

13. A company receives its catalogs in boxes that are $2\frac{1}{2}$ feet high, $1\frac{3}{4}$ feet wide, and 1 foot long. Estimate the volume of each box by first rounding each dimension to the nearest whole number.

- A. 2 cubic feet
- B. 4 cubic feet
- C. $4\frac{3}{8}$ cubic feet
- D. 6 cubic feet

(ML 13: Estimation)

14. The scale on an office floorplan is $\frac{1}{2}$ inch = 5 feet. How wide is the actual office if the floorplan shows the width as 2 inches?

- A. 4 feet
- B. 5 feet
- C. 10 feet
- D. 20 feet

(ML 14: Scale)

15. The scale drawing of a warehouse is 8 inches long and 4 inches wide. How long is the warehouse if the scale is 2 inches = 50 feet?

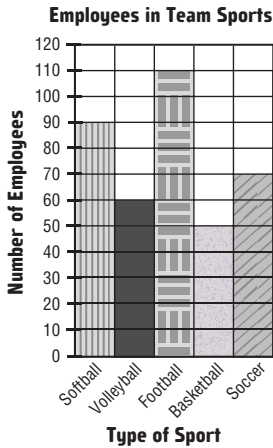
- A. 32 inches
- B. 50 feet
- C. 100 feet
- D. 200 feet

(ML 15: Problem Solving)

SCORE
Geometry and Measurement (ML 11–15)
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Data Analysis, Statistics, and Probability

16. Use this bar graph to find the mean number of employees who play team sports.



- A. 60
- B. 70
- C. 76
- D. 380

(ML 16: Bar Graphs and Mean)

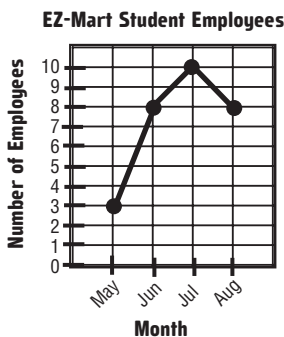
17. A total of 16 drinks were sold from the vending machine. According to this circle graph, about how many of them were seltzers?



- A. 1
- B. 3
- C. 5
- D. 6

(ML 17: Circle Graphs)

18. Use this line graph to find the range of student employees.

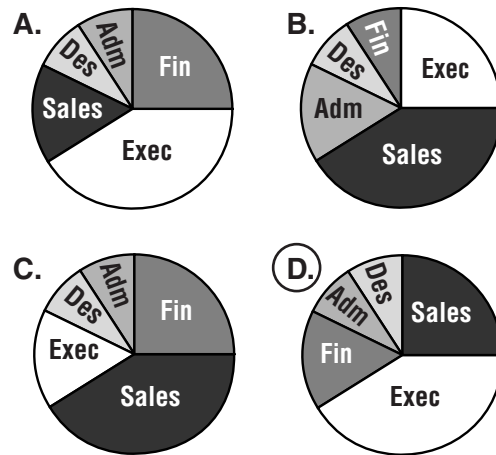


- A. 5
- B. 7
- C. 8
- D. 10

(ML 18: Mean, Median, Mode, and Range)

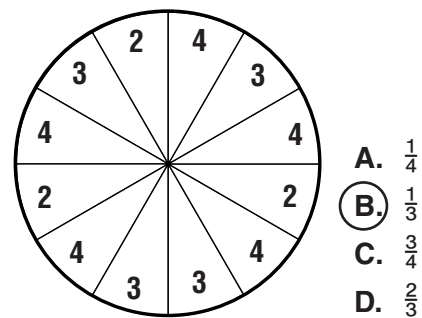
19. Which circle graph best represents the data in this table?

Bonuses by Department	
Department	# of Bonuses
Sales (Sales)	5
Finance (Fin)	3
Administrative (Adm)	2
Design (Des)	2
Executive (Exec)	8



(ML 19: Data and Graphs)

20. What is the probability of a spinner arrow landing on the number 3?



- A. $\frac{1}{4}$
- B. $\frac{1}{3}$
- C. $\frac{3}{4}$
- D. $\frac{3}{8}$

(ML 20: Problem Solving)

SCORE

Data Analysis, Statistics, and Probability (ML 16–20) / 5

Algebra

21. What is the rule for this table?

Printers (p)	Computers (c)
2	2
3	4
4	6
5	8

- A. $2c - 2 = p$
- B. $2c + 2 = p$
- C. $2p + 2 = c$
- D. $2p - 2 = c$

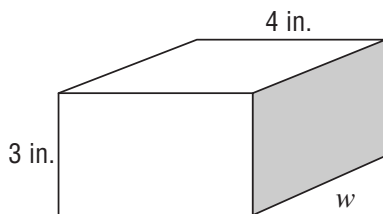
(ML 21: Algebraic Symbols)

22. Solve for x : $2x + 0.5x + 125 = 525$

- A. 4.12
- B. 160
- C. 210
- D. 260

(ML 22: Solving Equations [Numbers and Operations])

23. If the volume of this rectangular prism is 72 cubic inches, what is its width?



- A. 6 inches
- B. 18 inches
- C. 24 inches
- D. 58 inches

(ML 23: Solving Equations [Geometry])

24. Use this table to find how much is spent each week on regular coffee if the mean weekly cost is \$18.00.

Weekly Cost of Coffee by Flavor	
Hazelnut	\$12.50
Decaf	\$23.00
Regular	c
Mocha	\$10.50

- A. \$12.50
- B. \$26.00
- C. \$46.00
- D. \$72.00

(ML 24: Solving Equations [Mean and Median])

25. There are 21 highlighters in the supply closet. There are as many yellow ones as there are orange ones. There are five times as many pink ones as there are orange ones. How many yellow highlighters are in the supply closet?

- A. 3
- B. 7
- C. 15
- D. 21

(ML 25: Problem Solving)

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Algebra (ML 21–25)	<input type="text"/> / 5

TOTAL POSTTEST SCORE	
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