

CMC Level F Posttest

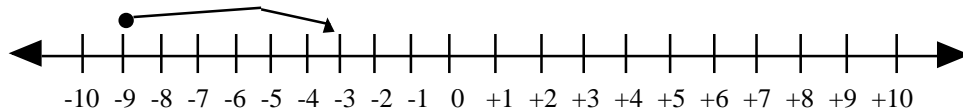
Directions for students are as follows:

There is no time limit for this test. Calculators are not permitted. Show your work for each problem, as points are given for working the appropriate steps as well as for the correct answer. Make a box around each final answer.

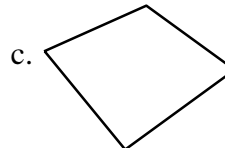
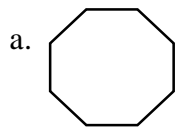
Part 1. Copy and complete the table.

	Decimal	■ /100	Percent
a.	1.50		
b.			60%
c.		$\frac{5}{100}$	

Part 2. Write the complete equation for the arrow shown. Remember the signs.



Part 3. Write the name of each figure.



Part 4. Write the regular time for each 24-hour time.

- a. 15:16 b. 5:01 c. 22:22

Part 5. For each item, combine the values added. Combine the values subtracted. Work the new problem.

a. $0 - 3 + 16 + 30 - 9 - 6 = \blacksquare$ b. $0 - 12 - 56 + 9 - 1 + 75 = \blacksquare$

Part 6. Write a complete equation for each item. Show your answer with a base number and exponent.

a. $(3 \times 3 \times 3) \times (3 \times 3 \times 3 \times 3)$

$$\blacksquare^{\blacksquare} \times \blacksquare^{\blacksquare} = \blacksquare^{\blacksquare}$$

b. $(9) \times (9 \times 9) \times (9 \times 9 \times 9 \times 9 \times 9)$

$$\blacksquare^{\blacksquare} \times \blacksquare^{\blacksquare} \times \blacksquare^{\blacksquare} = \blacksquare^{\blacksquare}$$

c. $\frac{7 \times 7 \times 7}{7 \times 7 \times 7 \times 7}$

$$\frac{\blacksquare^{\blacksquare}}{\blacksquare^{\blacksquare}} = \blacksquare$$

d. $\frac{R \times R \times R \times R}{R \times R \times R \times R}$

$$\frac{\blacksquare^{\blacksquare}}{\blacksquare^{\blacksquare}} = \blacksquare^{\blacksquare}$$

Part 7. Copy and work each item.

a. $-20(-2) =$

d. $\frac{-14}{x - 1}$

b. $+4(-6) =$

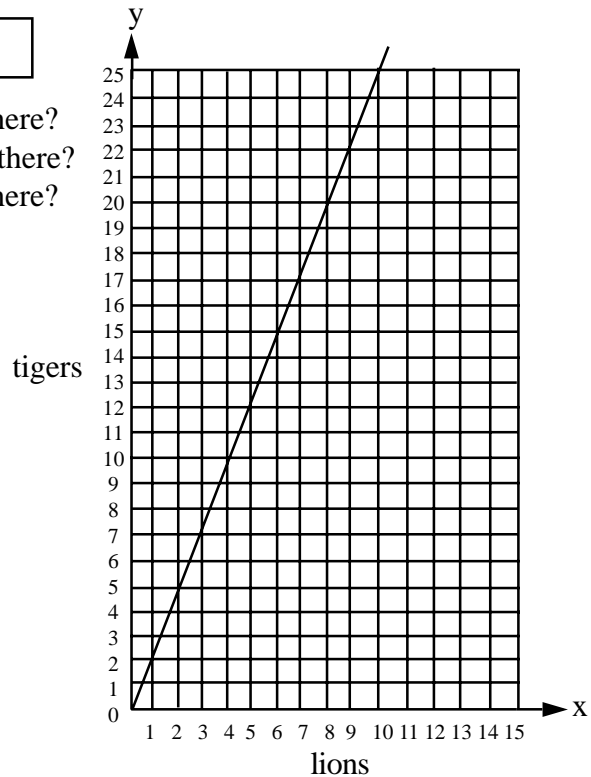
e. $\frac{+3}{x - 4}$

c. $-9(+3) =$

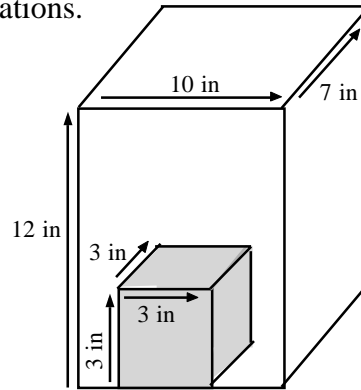
Part 8. Answer each question. Write your answer with a number and a unit name.

The line shows the ratio of tigers to lions.

- a. If there are 8 lions, how many tigers are there?
- b. If there are 15 tigers, how many lions are there?
- c. If there are 5 tigers, how many lions are there?



Part 9. Here's a large container with a cube in it. Figure out how much liquid the container can hold. Show each step in your calculations.



Part 10. Copy and work each item.

a. $3 \times \square = 120$

e. $35 (\square) = \square = 1$

i. $\frac{10}{15} (\square) = \square = 1$

b.
$$\begin{array}{r} 2.05 \\ \times 7 \\ \hline \end{array}$$

f. $\square \times 5 = 3$

j.
$$\begin{array}{r} 7\frac{4}{5} \\ \times 1\frac{1}{9} \\ \hline \end{array}$$

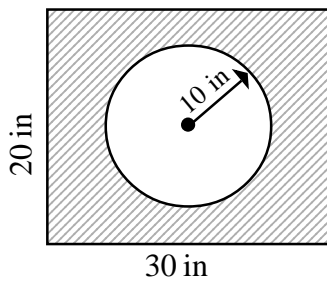
c. $\frac{12}{8} \times \frac{5}{8} = \square$

g.
$$\begin{array}{r} 3.75 \\ \times .02 \\ \hline \end{array}$$


d. $5.3 \times 100 = \square$


h. $\square \times 4 = 200$

Part 11. Find the shaded area of the figure.





Part 12. Write the answer to each question.

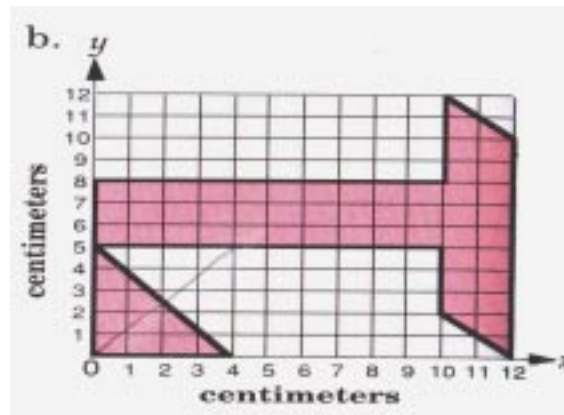
a.  How many degrees are in this figure?

b.  What's the name of this figure?

Part 12 (Cont)

- c.  How many degrees in this figure?
- d. How many degrees are in a whole circle?
- e.  How many degrees?

Part 13. Find the area of each shaded figure.



Part 14. Work each item. Remember the unit name.

- a. The gravel is divided into 8 equal-sized piles. The total weight of the gravel is 4,600 pounds. How much does each pile weigh?
- b. Ginger has 60 coins in all. She has \$2 in nickels. She has 6 quarters. The rest of her money is in dimes. How much does she have in all?

Part 15. Work each item. Remember the unit name.

- a. Jane is $\frac{3}{5}$ the weight of her father. Her father weighs 210 pounds. How much does Jane weigh?
- b. Jane is $\frac{2}{3}$ the age of an elm tree. Jane is 40 years old. What is the age of the elm tree?

Part 16. Work each item. Remember to answer both questions with a number and unit name.

- a. In a factory, the time required to cut out a shirt is $\frac{7}{3}$ the time required to cut out a tie. The time for cutting out a tie is 19 seconds.
1. How much time is required for a shirt?
 2. How much more time is required for a shirt than for a tie?
- b. A job requires a painter to use blue paint and white paint. The ratio of blue paint to white paint is 3 to 1. The painter uses a total of 25 gallons of paint.
1. How much blue paint does the painter use?
 2. How much white paint does the painter use?

Part 17. Find the mystery number. Show your work.

- a. You start with a number. You divide by 10. You multiply by 7. Then you subtract 2. You end up with 54. What number did you start with?

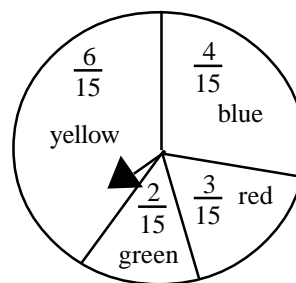
Part 18. Make a table. Show the ratio numbers, the expected numbers for trials, and the actual numbers for trials.

Facts

A person took trials with a spinner. The expected number for red is 60. Here are some of the results.

- The spinner landed one color 83 times
- The spinner landed on another color 37 times.
- The spinner landed on another color 128 times.

The graph shows fractions for the different colors.



Questions

- a. How many trials did the person take?
- b. How many times did the spinner land on red?
- c. How many times did the spinner land on green?
- d. What's the expected number for green?
- e. What color was landed on 128 times?