

"70" →

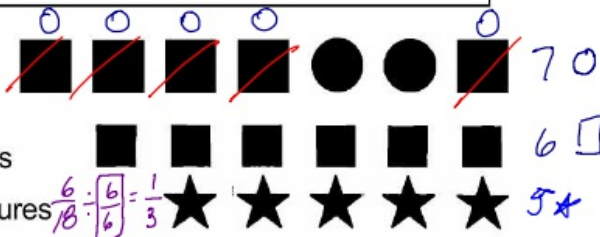
What Happened When There Was a Kidnapping at Bizarre Middle School?

Write each ratio in simplest form, then find your answer at the bottom of the page. Write the letter of the exercise in the box above the answer.

I. Write each ratio.

- (E) Stars to squares $\frac{5}{6}$
 (H) squares to circles
 (M) Stars to circles

- (O) Circles to stars
 (T) Stars to all figures
 (E) Squares to all figures



2 II. A TV screen is 15 in. high and 20 in. wide. Write each ratio.

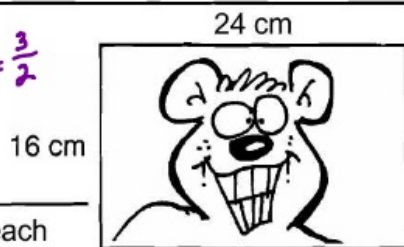
- (H) Height to width (A) Width to height

3 III. A magazine photograph is 24 cm long and 16 cm wide.

Write each ratio.

- (E) Length to width
 (P) Width to length

$\frac{24}{16} \div \frac{8}{8} = \frac{3}{2}$ LENGTH
 WIDTH $\frac{24}{16} \div \frac{2}{2} = \frac{12}{8} \div \frac{4}{4} = \frac{3}{2}$



4 IV. There are 30 students in a class, including 16 boys. Write each ratio.

- (H) Girls to boys (R) Boys to girls
 (E) Girls to all students (I) Boys to all students

$\frac{16}{14} \div \frac{2}{2} = \frac{8}{7}$

5 V. A fire-breathing swamp monster is 36 feet tall. When last observed, his shadow was 40 feet long. Write each ratio.

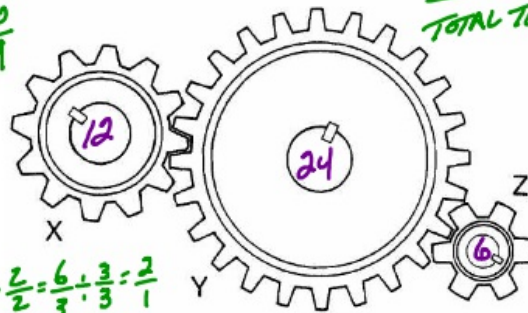
- (T) Height of monster to length of shadow
 (W) Length of shadow to height of monster

$\frac{36}{40} \div \frac{2}{2} = \frac{18}{20} \div \frac{2}{2} = \frac{9}{10}$ HEIGHT
 SHADOW

GEAR X
 TOTAL TEETH

6 VI. Count the number of teeth on each gear. Then write each ratio.

- (C) Teeth on Gear X to teeth on Gear Y
 (U) Teeth on Gear Y to teeth on Gear Z
 (K) Teeth on Gear X to teeth on Gear Z



$\frac{24}{6} \div \frac{3}{3} = \frac{8}{2} \div \frac{2}{2} = \frac{4}{1}$

$\frac{12}{6} \div \frac{2}{2} = \frac{6}{3} \div \frac{3}{3} = \frac{2}{1}$

				T	E				E	R		W																					U
5	6	7	2	9	5	4	1	7	1	8	5	10	7	2	3	7	3	8	5	8	4	2											
18	7	15	5	10	6	3	2	8	3	7	4	9	5	1	2	11	4	15	7	3	1	3											

Why Did the Writer Enjoy Living in a Basement?

Do each exercise and find your answer to the right. Write the letter of the answer in the box containing the number of the exercise. If the answer has a ●, shade in the box instead of writing a letter in it.

I. Write each ratio as a fraction in simplest form.

- (1) 7 to 12
 (2) 9:4
 (3) 8 to 10 $\frac{8}{10} \div \frac{2}{2} = \frac{4}{5}$
 (4) 20 to 12 $\frac{20}{12} \div \frac{2}{2} = \frac{10}{6} \div \frac{2}{2} = \frac{5}{3}$
 (5) 25:50 $\frac{25}{50} \div \frac{25}{25} = \frac{1}{2}$
 (6) 6 out of 15
 (7) 80 to 60
 (8) 35 out of 100
 (9) 78 out of 780
 (10) 90:30
 (11) The ratio of wins to tosses for a team with 60 wins and 90 losses. $\frac{7}{20}$
 (12) The ratio of girls to boys in a 7th grade class with 300 girls and 250 boys.
 (13) The ratio of red to blue for a purple paint made by mixing 24 oz of red with 28 oz of blue.
 (14) The ratio of blue to red for a purple paint made by mixing 24 oz of red with 28 oz of blue.

Answers:

- (H) $\frac{8}{5}$ (T) $\frac{4}{5}$ [3]
 (A) $\frac{1}{10}$ ● $\frac{4}{3}$
 ● $\frac{6}{5}$ (D) $\frac{3}{10}$
 (A) $\frac{7}{12}$ (S) $\frac{1}{2}$ [5]
 (A) $\frac{7}{6}$ (E) $\frac{9}{4}$
 ● $\frac{5}{3}$ [4] (I) $\frac{6}{7}$
 (E) $\frac{2}{3}$ (R) $\frac{2}{5}$

II. Write the ratio of the two measurements in the unit indicated (a *unit rate*).

- (15) A car traveled 300 miles on 15 gallons of gas. (miles per gallon)
 (16) Ima Smurf typed 120 words in 3 minutes. $\frac{120}{3} \div \frac{3}{3} = \frac{40}{1}$ (words per minute)
 (17) Dr. Cranium traveled 2,800 miles in 5 hours: (miles per hour)
 (18) A gear revolved 960 times in 30 minutes. (revolutions per minute)
 (19) Gloria Trench earned \$144 in 8 hours. (dollars per hour)
 (20) Roger Bannister ran 5,280 feet in 4 minutes. (feet per second) (HINT 4 min = ___ s)

Answers:

- (M) 48 (B) 560
 (C) 32 (L) 22
 (T) 15 ● 20
 (W) 40 [16] (N) 520
 (S) 18 (E) 36

13	3	7	16	9	5	15	1	4	17	11	19	8	12	18	2	20	10	14	6
	T		W		S														