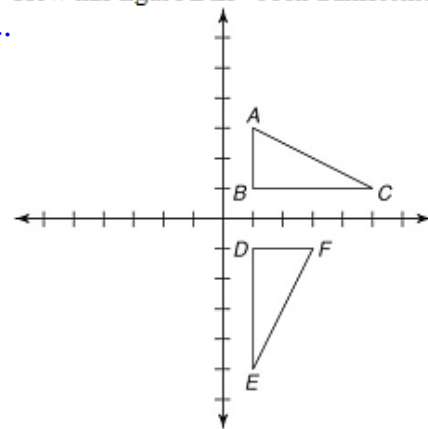


Warm-UP

How has figure DEF been transformed to form figure ABC ?

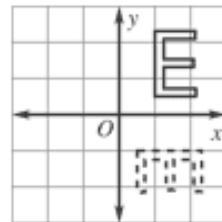
1.



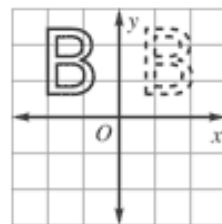
- a. reflection across x -axis
- b. 180° rotation around $(0, 0)$
- c. 90° rotation around $(0, 0)$
- d. translation 2 units down

2. Which diagram shows a reflection in the y -axis?

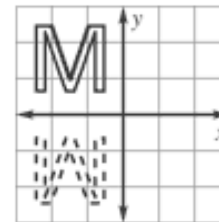
a.



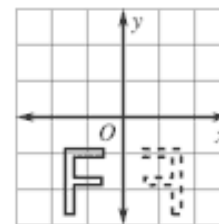
b.



c.

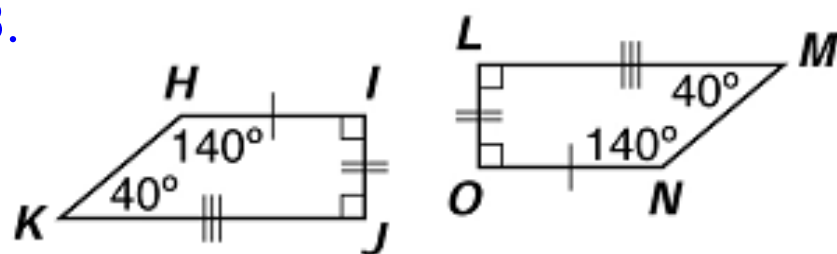


d.



Identify the correct congruence statement for the pair of polygons shown.

3.



- | | |
|--|--|
| a. trapezoid HIKJ \cong trapezoid IJLO | c. trapezoid IJKH \cong trapezoid KHNM |
| b. trapezoid KJIH \cong trapezoid MLON | d. trapezoid JIHK \cong trapezoid JIML |

4.

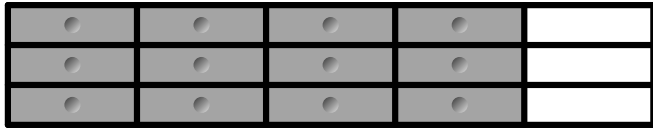
A figure is dilated by a scale factor of 3. If the origin is the center of dilation, what is the image of a vertex located at $(3, 4)$?

- | | |
|-----------------------------------|--------------|
| a. $\left(1, 1\frac{1}{2}\right)$ | c. $(9, 4)$ |
| b. $(3, 12)$ | d. $(9, 12)$ |

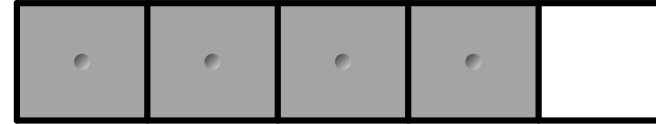
How can you write **Rational** numbers
in **equivalent** forms?

Rational Numbers
any number that can be written as
a fraction (as long as the
denominator is not zero)

Equivalent
having the same value



Fraction



Fraction

How do you know these two fractions are equivalent?

How do we find the decimal equivalent?

Simplifying Fractions:

Examples:

$$\frac{3}{8}$$

$$\frac{-12}{14}$$

$$\frac{49}{112}$$

Writing Decimals as Fractions:

1.0000

Write each decimal as a fraction in simplest form.

A 0.825

Writing Decimals as Fractions:

Examples:

0.6

0.25

0.525

2.08

B $\frac{1}{3}$

Writing Fractions as Decimals:

Examples:

$$\frac{5}{3}$$

$$-1\frac{7}{8}$$

$$\frac{4}{11}$$

Write each fraction as a decimal.

2. $\frac{2}{3}$

4. $\frac{23}{24}$

6. $\frac{18}{25}$

Write each decimal as a fraction in simplest form.

8. 0.56

10. 0.93

12. 6.02

Compare. Write a $>$, $<$, or $=$

$<$ less than
 $>$ greater than
 $=$ equal to

14. $\frac{4}{7} \bigcirc \frac{3}{8}$

16. $.35 \bigcirc \frac{1}{3}$

18. The weight of an object on the moon is $\frac{1}{6}$ its weight on Earth. Write $\frac{1}{6}$ as a decimal.

20. Oxygen makes up about $\frac{3}{5}$ of the human body. Write $\frac{3}{5}$ as a decimal.

22. On a test, Sam answered 52 out of 60 questions correctly. What fraction of Sam's answers were correct? What decimal?

Write each fraction as a decimal.

2. $\frac{2}{3}$

. $\overline{6}$

4. $\frac{23}{24}$

.958 $\overline{3}$

6. $\frac{18}{25}$

.72

Write each decimal as a fraction in simplest form.

8. 0.56

$\frac{14}{25}$

10. 0.93

$\frac{93}{100}$

12. 6.02

$6\frac{1}{50}$

Compare. Write a $>$, $<$, or $=$

$<$ less than
 $>$ greater than
 $=$ equal to

14. $\frac{4}{7} \textcircled{>} \frac{3}{8}$

16. $.35 \textcircled{>} \frac{1}{3}$

18. The weight of an object on the moon is $\frac{1}{6}$ its weight on Earth. Write $\frac{1}{6}$ as a decimal. $.1\bar{6}$

20. Oxygen makes up about $\frac{3}{5}$ of the human body. Write $\frac{3}{5}$ as a decimal. $.6$

22. On a test, Sam answered 52 out of 60 questions correctly. What fraction of Sam's answers were correct? What decimal?
 $\frac{13}{15}$ $.8\bar{6}$

