Gaining Math Momentum

NAME		

For #1 and 2, state the fraction represented by the shaded region in simplest form.





2.







3. Show the prime factorization of 20:

4. Show the prime factorization of 100:

5. Show the prime factorization of 126:

6. Show the prime factorization of 588:

7. What is the greatest common factor (GCF) of 8, 12, and 36?

8. What is the greatest common factor (GCF) of 15, 40 and 50?

9. What is the greatest common factor (GCF) of 10, 17, and 20?

10. A large environmental corporation owns a 50-acre property outside the city. They have installed solar panels on 35 of the 50 acres. In simplest form, what fraction of this property is covered with solar panels?

11. Rana brings a box of donuts to the company holiday party. The box contains 3 plain donuts, 2 chocolate donuts, 2 jelly donuts, 3 powdered sugar donuts, and 2 cinnamon donuts. In simplest form, what fraction of the donuts in the box are not jelly donuts?

For #12 - 17, write each fraction in simplest form.

12.
$$\frac{7}{56} =$$

13.
$$\frac{15}{75} =$$

14.
$$\frac{18}{48} =$$

15.
$$\frac{8}{28} =$$

16.
$$\frac{10}{70} =$$

17.
$$\frac{24}{48} =$$

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- 18. True or False: $\frac{3}{8}$ means 8 divided by 3.
- 19. True or False: $\frac{13}{4}$ is an example of an improper fraction.
- 20. True or False: $\frac{20}{23}$ is a fraction written in simplest form.
- 21. True or False: $\frac{1}{2}$ is equivalent to $\frac{24}{12}$.
- 22. True or False: $\frac{38}{10}$ is equivalent to $3\frac{4}{5}$.
- 23. True or False: 2 is the greatest common factor (GCF) of 12, 24, and 28.

For #24 - 27, write each fraction in simplest form. If the fraction is improper, write it as a mixed number.

24.
$$\frac{10}{7} =$$

25.
$$\frac{150}{120} =$$

26.
$$\frac{78}{195} =$$

27.
$$\frac{60}{144} =$$

- 28. Neil is baking cookies for a school fundraiser. Unfortunately, the only measuring spoon he can find in his kitchen is marked $\frac{1}{4}$ teaspoon. The recipe calls for $1\frac{1}{2}$ teaspoons of vanilla. How many times will he need to fill the measuring spoon to ensure the proper amount of vanilla?
- 29. Mark the point that represents $1\frac{3}{4}$ on the number line.



30. Mark the point that represents $3\frac{4}{16}$ on the number line.



31. Mark the point that represents $\frac{14}{12}$ on the number line.



For #32 and 33, circle the fractions that are equivalent.

32.
$$\frac{12}{42}$$
, $\frac{24}{64}$, $\frac{36}{126}$, $\frac{48}{168}$, $\frac{72}{190}$

33.
$$\frac{7}{12}$$
, $\frac{24}{14}$, $\frac{72}{42}$, $\frac{108}{63}$, $1\frac{5}{7}$

For #34 and 35, place the fractions in order from least to greatest.

34.
$$\frac{55}{99}$$
, $\frac{15}{9}$, $\frac{10}{3}$, $\frac{80}{90}$

35.
$$\frac{301}{98}$$
, $\frac{128}{48}$, $\frac{124}{93}$, $\frac{120}{72}$