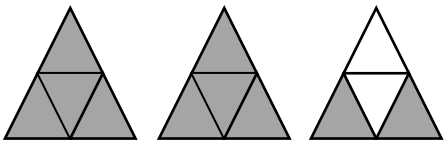
ANSWER KEY

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

1. 

$\frac{3}{4}$

2. 

$2\frac{1}{2}$

3. Show the prime factorization of 20:

$2^2 \cdot 5$

4. Show the prime factorization of 100:

$2^2 \cdot 5^2$

5. Show the prime factorization of 126:

$2 \cdot 3^2 \cdot 7$

6. Show the prime factorization of 588:

$2^2 \cdot 3 \cdot 7^2$

7. What is the greatest common factor (GCF) of 8, 12, and 36? 4

8. What is the greatest common factor (GCF) of 15, 40 and 50? 5

9. What is the greatest common factor (GCF) of 10, 17, and 20? 1

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? $\frac{7}{10}$

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? $\frac{5}{6}$

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

12. $\frac{7}{56} = \frac{1}{8}$

13. $\frac{15}{75} = \frac{1}{5}$

14. $\frac{18}{48} = \frac{3}{8}$

15. $\frac{8}{28} = \frac{2}{7}$

16. $\frac{10}{70} = \frac{1}{7}$

17. $\frac{24}{48} = \frac{1}{2}$

ANSWER KEY

18. True or False: $\frac{3}{8}$ means 8 divided by 3. *false*

19. True or False: $\frac{13}{4}$ is an example of an improper fraction. *true*

20. True or False: $\frac{20}{23}$ is a fraction written in simplest form. *true*

21. True or False: $\frac{1}{2}$ is equivalent to $\frac{24}{12}$. *false*

22. True or False: $\frac{38}{10}$ is equivalent to $3\frac{4}{5}$. *true*

23. True or False: 2 is the greatest common factor (GCF) of 12, 24, and 28. *false*

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

24. $\frac{10}{7}$ = $1\frac{3}{7}$

25. $\frac{150}{120}$ = $1\frac{1}{4}$

26. $\frac{78}{195}$ = $\frac{2}{5}$

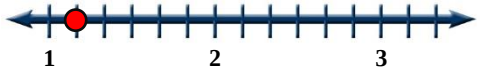
27. $\frac{60}{144}$ = $\frac{5}{12}$

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? *6 times*

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

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