LESSON 2-9

Reading Strategies

Multiple Meaning Terms

If you multiply or divide the numerator and denominator of a fraction by the same number, you get another fraction that is **equivalent,** or equal.

$\frac{2}{3} \cdot \frac{2}{2} = \frac{4}{6}$

In the example above, both the numerator and denominator are multiplied by 2. Equal fractions are called **equivalent fractions.**

$\frac{2}{3}$ is equivalent to $\frac{4}{6}$.

Answer the following questions.

1. Is $\frac{1}{2}$ equivalent to $\frac{6}{12}$? yes
2. How do you know?

   Possible answer: You can multiply both the numerator and denominator by 6 to get $\frac{6}{12}$.

3. Are $\frac{1}{5}$ and $\frac{2}{3}$ equivalent fractions? no
4. How do you know?

   Possible answer: You cannot multiply both 1 and 5 by the same number to get 2 and 3.

5. Is $\frac{7}{15}$ equivalent to $\frac{1}{7}$? no
6. How do you know?

   Possible answer: You cannot divide both 7 and 15 by the same number to get 1 and 7.

7. Is $\frac{3}{9}$ equivalent to $\frac{1}{3}$? yes
8. How do you know?

   Possible answer: You can divide both 3 and 9 by 3 to get $\frac{1}{3}$.

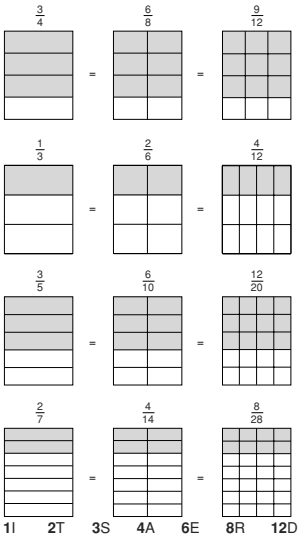
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LESSON 2-9

Puzzles, Twisters & Teasers

Are You in the Dark?

Fill in the boxes in the grids to show equivalent fractions. Then use the Answer Key to answer the riddle.



1I 2T 3S 4A 6E 8R 12D

Why did the tomato blush?

I	T		S	A	W		T	H	E
1	2		3	4			2		6

S	A	L	A	D		D	R	E	S	S	I	N	G	.
3	4		4	12		12	8	6	3	3	1			

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LESSON 2-10

Practice A

Equivalent Fractions and Decimals

Write each fraction as a decimal. Round to the nearest hundredth, if necessary.

1. $\frac{7}{10}$ 0.7
2. $\frac{9}{20}$ 0.45
3. $\frac{3}{4}$ 0.75
4. $\frac{20}{25}$ 0.8
5. $\frac{3}{8}$ 0.375
6. $\frac{7}{5}$ 1.4
7. $\frac{21}{7}$ 3.0
8. $\frac{5}{3}$ 1.667
9. $\frac{3}{10}$ 0.3
10. $\frac{4}{5}$ 0.8
11. $\frac{1}{25}$ 0.04
12. $\frac{3}{20}$ 0.15

Write each decimal as a fraction or mixed number in simplest form.

13. 0.55 $\frac{11}{20}$
14. 0.03 $\frac{3}{100}$
15. −0.75 $-\frac{3}{4}$
16. 2.1 $2\frac{1}{10}$ or $\frac{21}{10}$
17. 5.25 $5\frac{1}{4}$ or $\frac{21}{4}$
18. 9.33 $9\frac{33}{100}$ or $\frac{933}{100}$
19. 1.8 $\frac{9}{5}$ or $1\frac{4}{5}$
20. −1.74 $-\frac{87}{50}$ or $-1\frac{37}{50}$
21. 10.6 $\frac{53}{5}$ or $10\frac{3}{5}$
22. −7.08 $-7\frac{2}{25}$ or $-\frac{177}{25}$
23. 0.625 $\frac{5}{8}$
24. 0.001 $\frac{1}{1{,}000}$

Write each answer as a decimal rounded to the nearest thousandth.

25. Out of 45 times at bat, Raul got 19 hits. Find Raul's batting average.

    0.422

26. On a test, Selena answered 26 out of 30 questions correctly. What portion of her answers was correct?

    0.867

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LESSON 2-10

Practice B

Equivalent Fractions and Decimals

Write each fraction as a decimal. Round to the nearest hundredth, if necessary.

1. $\frac{2}{10}$ 0.2
2. $\frac{19}{20}$ 0.95
3. $\frac{5}{8}$ 0.625
4. $\frac{11}{5}$ 2.2
5. $\frac{19}{6}$ 3.167
6. $\frac{17}{4}$ 4.25
7. $\frac{13}{12}$ 1.083
8. $\frac{30}{7}$ 4.286
9. $\frac{7}{4}$ 1.75
10. $\frac{9}{20}$ 0.45
11. $\frac{11}{10}$ 1.1
12. $\frac{2}{25}$ 0.08

Write each decimal as a fraction in simplest form.

13. 0.85 $\frac{17}{20}$
14. 0.11 $\frac{11}{100}$
15. −0.25 $-\frac{1}{4}$
16. 4.3 $4\frac{3}{10}$ or $\frac{43}{10}$
17. 7.75 $7\frac{3}{4}$ or $\frac{31}{4}$
18. 5.03 $5\frac{3}{100}$ or $\frac{503}{100}$
19. −1.06 $-1\frac{3}{50}$ or $-\frac{53}{50}$
20. 0.375 $\frac{3}{8}$
21. −2.65 $-2\frac{13}{20}$ or $-\frac{53}{20}$
22. −5.6 $-5\frac{3}{5}$ or $-\frac{28}{5}$
23. 1.12 $1\frac{3}{25}$ or $\frac{28}{25}$
24. 0.005 $\frac{1}{200}$

Write each answer as a decimal rounded to the nearest thousandth.

25. In the 1998 Winter Olympics, a total of 205 medals were awarded. The United States won 13 medals. What portion of the medals did the United States win?

    0.063

26. On a test, Hailey answered 64 out of 75 questions correctly. What portion of her answers was correct?

    0.853

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