

Section A: Practice Problems

1. Pre-unit

What fraction of each figure is shaded?





2. Pre-unit

Explain why the shaded portion represents $\frac{1}{8}$ of the full rectangle.



3. Pre-unit

Label each tick mark with the number it represents. Explain your reasoning.



4. Pre-unit

Explain or show why $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent fractions.



- 5. a. The entire diagram represents 1 whole. Shade the diagram to represent $\frac{1}{4}$.
 - b. To represent $\frac{1}{6}$ on the tape diagram, would we shade more or less than what we did for $\frac{1}{4}$? Explain your reasoning.

(From Unit 2, Lesson 1.)

6. a. The entire diagram represents 1 whole. What fraction does the shaded portion represent? Explain your reasoning.

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| | | | | | | | | | |
| b. Shade this diag | ram to | repre | sent | $\frac{2}{10}$. | | | | | |



(From Unit 2, Lesson 2.)



7. For each pair of fractions, decide which is greater. Explain or show your reasoning.

a.
$$\frac{1}{8}$$
 or $\frac{1}{10}$

b.
$$\frac{4}{10}$$
 or $\frac{7}{10}$

c.
$$\frac{4}{5}$$
 or $\frac{5}{4}$

(From Unit 2, Lesson 3.)

8. Use the fraction strips to name three pairs of equivalent fractions. Explain how you know the fractions are equivalent.

| $\frac{1}{12}$ $\frac{1}{12}$ | $\begin{array}{c c} 1 \\ 12 \\ 12 \\ 12 \end{array}$ |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--|
| | | | | | |
| 1 1 | · 1 | · 1 · | · 1 | · 1 · | · 1 |
| 6 | 6 | 6 | 6 | 6 | 6 |

(From Unit 2, Lesson 4.)



9. a. Explain or show why the point on the number line describes both $\frac{3}{5}$ and $\frac{6}{10}$.



b. Explain why $\frac{6}{10}$ and $\frac{3}{5}$ are equivalent fractions.

(From Unit 2, Lesson 5.)

10. For each question, explain your reasoning. Use a number line if you find it helpful.



(From Unit 2, Lesson 6.)



11. Exploration

Make fraction strips for each of these fractions. How did you fold the paper to make sure you have the right-size parts?





12. Exploration

a. Andre looks at these fraction strips and says "Each $\frac{1}{2}$ is $\frac{1}{3}$ and another half of $\frac{1}{3}$ ". Do you agree with Andre? Explain your reasoning.



b. What relationship do you see between $\frac{1}{6}$ and $\frac{1}{4}$? Explain your reasoning.



c. Can you find a relationship between $\frac{1}{6}$ and $\frac{1}{8}$ using fraction strips?