$\qquad$
$\qquad$ Class $\qquad$

1. In the diagram, the hundredths grid is the whole. Use the grid to answer each of the following questions and write each answer in both decimal and fraction form.
a. What portion of the grid is shaded gray?
b. What portion of the grid is striped?
c. What portion of the grid is checkered?
d. What portion of the grid is blank?

2. For each pair of numbers, insert a less-than symbol ( $<$ ), a greater-than symbol $(>)$, or an equals symbol $(=)$ between the numbers to make a true statement.
a. 0.305
0.35
b. 0.123
0.1002
c. 0.25
0.25000
d. 0.25
0.025
e. 3.45
3.045
f. 12.03
12.30
3. For each pair of numbers, insert a less-than symbol ( $<$ ), greater-than symbol $(>)$, or an equals symbol $(=)$ between the numbers to make a true statement.
a. $2.5 \quad 2 \frac{2}{5}$
b. 0.65
$\frac{2}{3}$
c. 0.8
$\frac{4}{7}$
d. $\frac{5}{8}$
0.625
e. 0.3
$\frac{3}{7}$
f. 2.1
$1 \frac{9}{10}$
g. $\frac{11}{12} \quad \frac{11}{11}$
h. $\frac{3}{6}$
0.5
i. 9
$8 \frac{8}{10}$
4. Copy each number line below. In each case, two of the marks are labeled.

Label the unlabeled marks with decimal numbers.
a.

b.

c.

d.

$\qquad$
$\qquad$
$\qquad$
5. Name three fractions that are equivalent to each decimal below. Explain your reasoning. Draw a picture if it helps you explain your thinking.
a. 0.60
b. 1.7
c. 0.05
d. 2.3
e. 0.15
f. 0.625
6. Name a decimal that is equivalent to each fraction below. Explain your reasoning. Draw a picture if it helps you explain your thinking.
a. $\frac{1}{2}$
b. $\frac{3}{15}$
C. $\frac{7}{4}$
d. $\frac{3}{8}$
e. $\frac{111}{20}$
f. $\frac{18}{24}$
7. Sarah can jog at a steady pace of 4.75 miles per hour, and Tony can jog at a steady pace of 4.25 miles per hour.
a. How many miles can Sarah jog in 30 minutes? Explain your reasoning.
b. How many miles can Tony jog in 30 minutes?
c. If Sarah and Tony jog for 45 minutes, how much farther will Sarah go than Tony? Explain your reasoning.
8. Each small square on the grid represents $\frac{1}{5}$.
a. What whole number is represented by the whole grid?

b. What decimal is represented by the shaded region of the grid?
9. Each small square on the grid represents 0.25 .

a. What whole number is represented by the whole grid?
b. What fraction is represented by the shaded region of the grid?
10. Paul claims that the fraction $\frac{1}{3}$ is a good estimate for the decimal 0.3.
a. Do you agree or disagree with Paul's claim? Explain your reasoning.
b. Is Paul's estimate less than, greater than, or equal to 0.3? Explain your reasoning.

