

Notes:

1) The Secret Art of Reducing:

Rule #1: Know the divisibility rules.

Rule #2: Do not forget rule #1.

The Rules to aid in reducing fractions are:

- a) If both numbers are even, you can reduce by a factor of _____.
- b) If both numbers end in a zero, you can reduce by a factor of _____.
- c) If both numbers end in a zero or a five, you can reduce by a factor of _____.
- d) If the digits of both numbers add up to a multiple of _____, you can reduce by a factor of _____. (Note this technique also works for _____).

Examples: Reduce the following fractions.

a) $\frac{15}{35}$

b) $\frac{24}{28}$

c) $\frac{200}{550}$

d) $\frac{48}{63}$

Problem Set.

Write the following decimals as fractions or mixed numbers then reduce.

1) 0.2

2) 0.40

3) 0.1

4) 0.25

5) 0.600

6) 2.4

7) 0.3

8) 10.5

Reduce the following fractions completely.

9) $\frac{5}{10}$

10) $\frac{3}{9}$

11) $\frac{20}{100}$

12) $\frac{3}{12}$

13) $\frac{8}{10}$

14) $\frac{14}{16}$

15) $\frac{5}{25}$

16) $\frac{27}{36}$

17) $\frac{3}{6}$

18) $\frac{4}{12}$

19) $\frac{9}{81}$

20) $\frac{10}{40}$

21) Mitch scored 0.80 on his test. What is his percent? What reduced fraction would this be?

22) What fraction of a dollar is \$0.75? Reduce your answer.

23) What fraction of a dollar is \$0.20? Reduce your answer.

24) Change 40% to a decimal, then write it as a reduced fraction.

Use your divisibility rules to determine if 2, 3, 5, 9, or 10 will divide the following numbers evenly. There may be more than one right answer.

25) 27

26) 24

27) 15

28) 50

Review.

Change the following percents to decimals.

29) 6.8%

30) 125%

Change the following decimals to percents.

31) 0.732

32) 8.605

Evaluate each of the following. Show work.

33) 2.8% of 536

34) 342% of 50

35) Of all the cars in the parking lot, 18% of them were red. If there are 826 cars in the parking lot, then how many of them are red. Show work and label answer.

In 36 - 38, fill-in-the-blank. Make each math sentence true by using $<$, $>$, or $=$.

36) $\frac{3}{5}$ _____ $\frac{5}{8}$

37) $8\frac{12}{16}$ _____ $8\frac{3}{4}$

38) $4\frac{2}{3}$ _____ $4\frac{5}{8}$