

1) Reduce $\frac{112}{256}$

1) $(4\frac{1}{2})^3$

Decimals.

2) $38.7 - 0.0914$

1) $(8\frac{2}{3})^2$

2) $\frac{5}{6} + \frac{5}{7}$

3) $2\frac{3}{4} \cdot \frac{17}{3}$

1) $(2\frac{1}{2})^3$

2) $5\frac{2}{3} \cdot 6\frac{3}{4}$

3) Division. Leave the answer as a mixed number.

$9234 \div 67$

4) $\sqrt{1210000}$

5) $\sqrt{3600}$

6) $\sqrt[3]{125000}$

7) $\sqrt[5]{32}$

*****to here*****

1) Convert to a fraction:

- a) 0.5
- b) 0.8
- c) 0.125
- d) 0.5
- e) $0.\bar{6}$

1) Convert to a decimal:

- f) $\frac{7}{20}$
- g) $\frac{7}{11}$
- h) $\frac{7}{9}$

Fractions.

- 2) $\frac{5}{6} - \frac{3}{8}$
- 3) $(3\frac{3}{5})^2$
- 4) $4\frac{1}{6} \div \frac{5}{9}$

Divisibility.

State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10.

- 5) 3,622
- 6) 687,528
- 7) 58,395
- 8) 90,472,550

Short Division.

- 9) Leave your answer as an exact decimal.
 $3079 \div 40$

Long Division.

- 10) Leave your answer rounded to three significant digits.

$$0.3 \div 37.1$$

- 11) Convert the following improper fraction to *both* a mixed number and an exact decimal.

$$\frac{6231}{88}$$

Convert to decimals.

- 1) Some of these you should have memorized, for others (20ths, 11ths, 9ths, 99ths, etc.) there are tricks, and for the rest you'll have to divide.

- a) $\frac{1}{4}$
- b) $\frac{7}{8}$
- c) $\frac{7}{9}$
- d) $\frac{3}{20}$
- e) $\frac{3}{4}$
- f) $\frac{1}{5}$
- g) $\frac{3}{8}$
- h) $\frac{83}{99}$
- i) $\frac{8}{11}$

j) $\frac{11}{40}$

k) $\frac{4}{5}$

l) $\frac{19}{20}$

m) $\frac{6}{11}$

n) $\frac{19}{30}$

2) Cast out nines to check your answer.

$$\begin{array}{r} 857900 \\ \times 584000 \\ \hline \end{array}$$

Divisibility.

State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10.

3) 85,734

4) 85,741,920

Fractions.

5) $\frac{16}{25} + \frac{14}{15}$

6) $7\frac{4}{5} \div 3\frac{1}{4}$

7) $\frac{7\frac{4}{5}}{3\frac{1}{4}}$

8) $657\frac{8}{9} - 652\frac{2}{3}$

9) $(3\frac{1}{3})^3$

Unit Cost.

10) If nine red pens cost \$5.13, and eleven green pens cost \$6.49, then which one has a cheaper unit price?

11) If five pounds of oranges cost \$4.25, then what is the cost, at that same rate, of seven pounds of oranges?

Short Division.

12) Leave your answer as an exact decimal.
76941 \div 800

Long Division.

13) Leave your answer rounded to three significant digits.

57.2 \div 4.83

14) Convert the following improper fraction to *both* a mixed number and an exact decimal.

$$\frac{7671}{37}$$

Convert to decimals.

1) Each one either has a trick or should be memorized.

a) $\frac{2}{9}$

b) $\frac{1}{20}$

c) $\frac{9}{20}$

d) $\frac{2}{3}$

e) $\frac{3}{5}$

f) $\frac{7}{10}$

g) $\frac{59}{100}$

h) $\frac{1}{8}$

i) $\frac{5}{11}$

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

k) $\frac{68}{99}$

l) $\frac{713}{999}$

m) $\frac{9}{11}$

n) $\frac{5}{6}$

o) $\frac{5}{8}$

p) $\frac{13}{20}$

Estimate. Round the numbers in the question to one or two significant digits, then estimate the answer.

2) $685,036 + 725,672$

3) $2276 \cdot 807$

4) $81763 - 69627$

5) $48753 \div 716$

Unit Cost.

6) If five light bulbs cost \$3.40, then how much do eight light bulbs cost?

7) If five light bulbs cost \$2.45, then how much do 20 light bulbs cost?

Fractions.

8) $73\frac{3}{11} - 68\frac{1}{2}$

9) $\frac{5}{9} + \frac{7}{36}$

10) $\frac{5\frac{5}{8}}{6}$

11) $3 \div 4\frac{3}{8}$

12) $4\frac{3}{8} \cdot 5$

Divisibility.

State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10.

13) 81,945

14) 9,472,152

Short Division.

15) Leave your answer as a mixed number.
 $94034 \div 6$

Long Division.

16) Convert the following improper fraction to *both* a mixed number and an exact decimal.

$$\frac{697}{24}$$

Convert to decimals.

1) Each one either has a trick or should be memorized.

a) $\frac{2}{5}$

j) $\frac{7}{9}$

b) $\frac{3}{4}$

k) $\frac{1}{10}$

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

l) $\frac{1}{11}$

d) $\frac{1}{3}$

m) $\frac{1}{9}$

e) $\frac{7}{99}$

n) $\frac{8}{9}$

f) $\frac{4}{9}$

o) $\frac{91}{100}$

g) $\frac{4}{11}$

p) $\frac{75}{999}$

h) $\frac{7}{20}$ q) $\frac{4}{999}$

i) $\frac{1}{6}$ r) $\frac{17}{20}$

2) Convert to fractions.

a) 0.5 f) 0.3

b) 0.6 g) 0.125

c) 0.7 h) 0.83

d) 0.17 i) 0.7

e) 0.75 j) 0.23

Divisibility.

State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10.

3) 8,041,736

4) 7,485,030

Fractions.

5) $39\frac{2}{7} + 33\frac{3}{4}$

6) $(2\frac{1}{2})^4$

7) What is $\frac{1}{3}$ of 360?

8) What is $\frac{3}{5}$ of 45?

9) What is $\frac{5}{9}$ of 45?

10) What is $\frac{2}{3}$ of 45?

11) What is $\frac{3}{7}$ of 45?

Decimals.

12) $379.4 - 6.932$

13) $(0.0079)^2$

14) $(1.1)^4$

Long Division.

State exactly what the mistake is in this problem:

$$\begin{array}{r}
 15) \quad 161 \\
 \underline{47 \ 79} \\
 -47 \\
 \hline
 329 \\
 \underline{-282} \\
 47 \\
 \underline{-47} \\
 0
 \end{array}$$

Round your answers to three significant digits.

16) $2.52 \div 8200$

17) $130000 \div 6.78$

Fractions.

1) $\frac{39}{8} + 13\frac{5}{8}$

2) $\frac{4\frac{1}{2}}{\frac{4}{5}}$

3) What is $\frac{1}{6}$ of 24?

4) What is $\frac{2}{5}$ of 5500?

5) What is $\frac{2}{3}$ of 4?

6) What is $\frac{3}{8}$ of 280?

7) What is half of $\frac{4}{7}$?

8) What is half of $\frac{5}{11}$?

9) What is $\frac{4}{9}$ doubled?

10) What is $\frac{3}{8}$ doubled?

Division.

11) Leave your answer as a mixed number.
 $62223 \div 8$

- 12) Leave your answer as an exact decimal.
 $87.5 \div 4.44$

Unit Cost.

- 13) If 5 pounds of bananas cost \$2.45, then how much do 15 pounds of bananas cost?
- 14) Which is a better deal: spring water sold at 29¢ per gallon, or spring water sold at 7¢ per quart?

Divisibility.

State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10.

- 1) 609,348
- 2) 86,175

Division.

- 3) Leave your answer as an exact decimal.
 $87.1 \div 16000$

Fractions.

- 4) $80\frac{1}{6} - 70\frac{5}{8}$
- 5) $(\frac{9}{70})^3$
- 6) What is $\frac{1}{8}$ of 4000?
- 7) What is $\frac{5}{6}$ of 420?
- 8) What is half of $\frac{7}{9}$?
- 9) What is half of $\frac{6}{11}$?
- 10) What is $\frac{5}{7}$ doubled?
- 11) What is $\frac{3}{16}$ doubled?
- 12) Reduce $\frac{400}{450}$

- 13) Reduce $\frac{306}{1980}$

- 14) Reduce $\frac{1560}{2520}$

Division.

- 1) Leave your answer as a mixed number.
 $441410000 \div 7000$

Decimals.

- 2) $345.9 + 65.93$
- 3) $345.9 - 65.93$
- 4) Cast out nines to check your answer.
 $345.9 \cdot 65.93$

Fractions.

- 5) Reduce each fraction:

- a) $\frac{28}{30}$
- b) $\frac{7560}{8100}$
- c) $\frac{900}{21000}$

Fractions.

- 1) $\frac{7}{8} + \frac{7}{12}$
- 2) $\frac{27}{35} + \frac{19}{27}$
- 3) $\frac{27}{35} \cdot \frac{19}{27}$
- 4) $4\frac{3}{8} \div 1\frac{5}{16}$
- 5) $\frac{4\frac{3}{8}}{1\frac{5}{16}}$

6) $\frac{1\frac{5}{16}}{4\frac{3}{8}}$

Division.

7) Leave your answer as an exact decimal.
 $856 \div 2.7$

Divisibility.

1) State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10

a) 75,930

b) 1,839,734

Fractions.

2) Reduce each fraction:

a) $\frac{1040}{1200}$

b) $\frac{216000}{504000}$

c) $\frac{59625}{91125}$

3) What is half of $\frac{5}{16}$?

4) What is half of $\frac{6}{17}$?

5) What is $\frac{5}{16}$ doubled?

6) What is $\frac{6}{17}$ doubled?

7) Convert to a decimal:

a) $\frac{3}{4}$

b) $\frac{5}{11}$

c) $\frac{61}{100}$

d) $\frac{61}{99}$

e) $\frac{3}{20}$

f) $\frac{2}{11}$

g) $\frac{7}{990}$

h) $\frac{3}{1000}$

i) $\frac{7}{25}$

j) $\frac{131}{400}$

k) $\frac{7}{20}$

l) $\frac{97}{135}$

m) $\frac{3}{8}$

n) $\frac{73}{99000}$

8) Convert to a reduced fraction:

a) 0.3

b) 0.5

c) 0.5

d) 0.75

e) 0.8

f) 0.0025

g) 0.1

h) 0.83

Division.

- 9) Leave your answer as a mixed number.
 $83745 \div 7$

Decimals.

- 1) $5080 + 87.42$
2) $5080 - 87.42$
3) Cast out nines to check your answer.

$$87.54 \cdot 0.762$$

- 4) Convert to a decimal:

a) $\frac{5}{8}$

b) $\frac{7}{11}$

c) $\frac{23}{50}$

d) $\frac{23}{30}$

e) $\frac{89}{99}$

f) $\frac{7}{1000}$

g) $\frac{7}{999}$

h) $\frac{7}{900}$

i) $\frac{53}{99900}$

j) $\frac{29}{270}$

- 5) Convert to a fraction:

a) 0.3

b) 0.59

c) 0.59

d) 0.059

e) $0.1\bar{6}$

Do it in your head: