Math Fundamental: Unit 2 Pre-Test

1.) (1 pt each, 2 pts total) Write the shaded amount as a fraction.

a)

b)

2.) (2 pts each, 4 pts total) Solve each fraction as though it were a division problem. Write your answer as a mixed number.

a) $\frac{78}{8}$

b) $\frac{57}{9}$

3.) (2 pts each, 4 pts total) Solve each problem. Make sure to write your answer as a fraction.

a) A doctor gave his patient liquid medicine and told him to drink 28 cups over the next 6 days. How much should the patient drink each day?

b) Sam had collected 60 leaves to feed to his caterpillar collection. If he wanted to split the leaves equally amongst the 7 cages, how much should he put in each cage?

4.) (2 pts each, 4 pts total) Solve each problem. Write the answer as a mixed number fraction (if possible).

a) $\frac{9}{12} - \frac{1}{12}$

b) $\frac{3}{4} + \frac{2}{4}$

5.) (3 pts each, 6 pts total) Solve each problem. Write the answer as a mixed number fraction (if possible).

a) $\frac{8}{10} - \frac{2}{4}$

b) $\frac{3}{6} + \frac{3}{8}$

6.) (3 pts each, 6 pts total) Solve each problem.

a) $5 \times \frac{1}{8}$

b) $\frac{1}{12} \times 4$

7.) (3 pts each, 6 pts total) Solve each problem. Answer as a mixed fraction.

a) $5 \times \frac{4}{6}$

b) $\frac{6}{10} \times 3$

8.) (3 pts each, 6 pts total) Solve each problem.

a) $\frac{2}{3} \times \frac{1}{2}$

b) $\frac{9}{12} \times \frac{6}{8}$

9.) (3 pts each, 12 pts total) Solve each problem. Answer as an improper fraction (if necessary)

a) $\frac{6}{7} \times \frac{7}{10}$

b) $\frac{9}{24} \times \frac{6}{90}$

c) $\frac{3}{2} \times 3\frac{4}{6}$

d) $\frac{7}{9} \times \frac{15}{4}$

10.) (3 pts each, 6 pts total) Solve each problem. Write your answer as a mixed number (if possible).

a) $\frac{1}{2} \div 9$

b) $7 \div \frac{1}{5}$

11.) (3 pts each, 6 pts total) Write your answer as a mixed number (if possible).

a) $\frac{22}{8} \div \frac{11}{2}$

b) $8\frac{1}{2} \div \frac{34}{6}$

12.) (3 pts each, 6 pts total) Name each of the following shapes. Place a check beside each category of shape for which it qualifies.

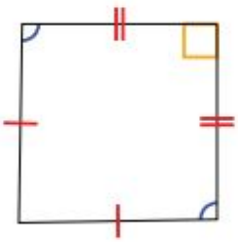
a) Name of Shape:

This shape also fall under the category of:

- ☐ kite
- ☐ parallelogram
- ☐ quadrilateral
- ☐ rectangle
- ☐ rhombus
- ☐ square
- ☐ trapezoid

b) Name of Shape:

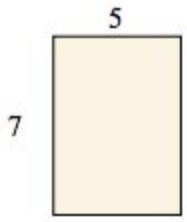
This shape also fall under the category of:



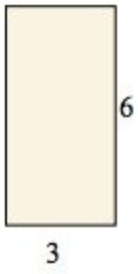
- ☐ kite
- ☐ parallelogram
- ☐ quadrilateral
- ☐ rectangle
- ☐ rhombus
- ☐ square
- ☐ trapezoid

13.) (2 pts each, 4 pts total) Find the area (in cm) of the rectangles shown.

a)

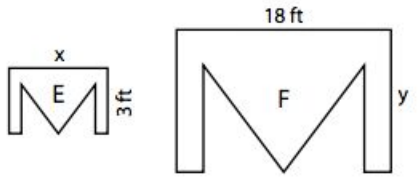


b)



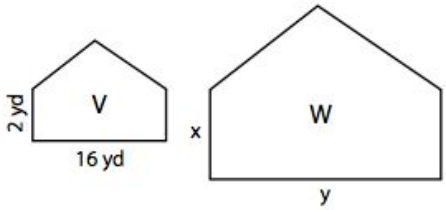
14.) (3 pts each, 6 pts total) Find x and y.

a) Scale factor of E to F is 1 : 3



x = _____ ; y = _____

b) Scale factor of W to V is 4 : 1



x = _____ ; y = _____

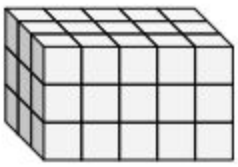
15.) (2 pts each, 4 pts total) Find the length, width and height of the rectangular prism. Then find the volume.

a) L = _____

W = _____

H = _____

V = _____

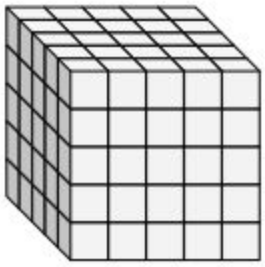


b) L = _____

W = _____

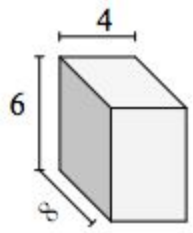
H = _____

V = _____

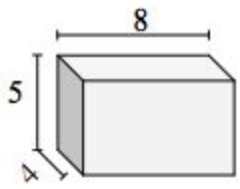


16.) (3 pts each, 6 pts total) Find the volume of each of the rectangular prisms. Measured in cm (not to scale).

a)

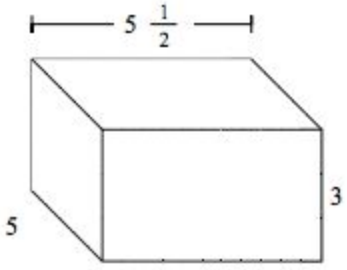


b)

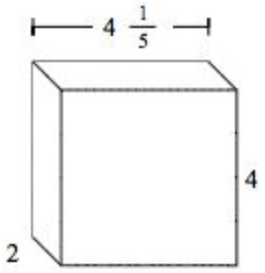


17.) (3 pts each, 6 pts total) Find the volume of each of the rectangular prisms. Measured in cm (not to scale).

a)

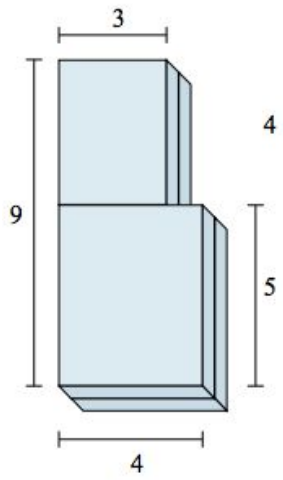
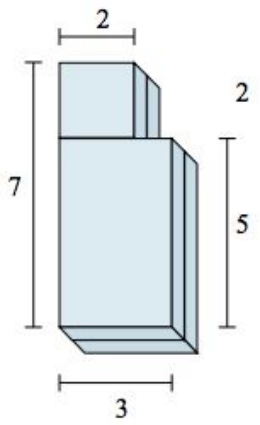


b)



18.) (3 pts each, 6 pts total) Find the total volume of each figure shown. Measured in cm (not to scale).

a)



b)