Unit 10 Study Guide
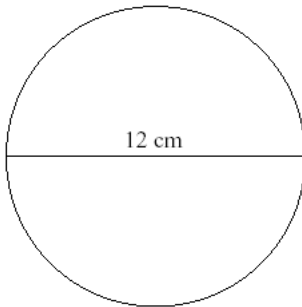
Area & Perimeter

Find the area and perimeter of each shape below.   You may leave the solution in terms of pi or use 3.14 to approximate it. Please label all units appropriately.
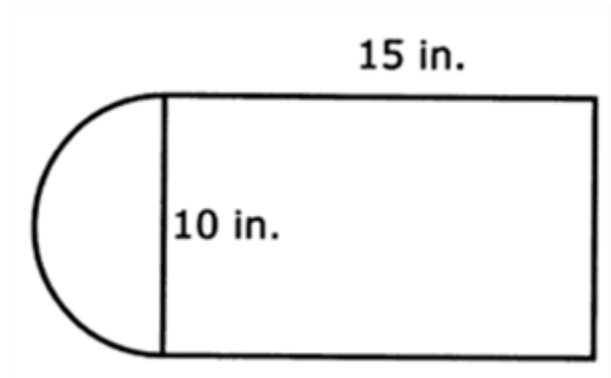
1.)

12 cm

C = _____

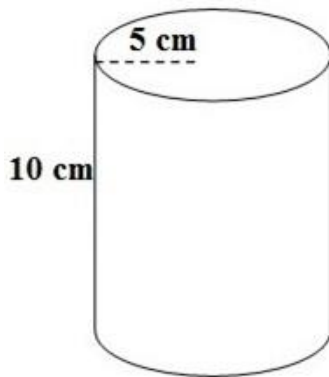A = _____

2.)

15 in.

10 in.

P = _____

A = _____

Volume: Composite, cylinders, sphere, prisms

For each find the volume. Find the surface area of 4..   You may leave in terms of pi or use 3.14 to approximate for pi. Please lable units appropriately.
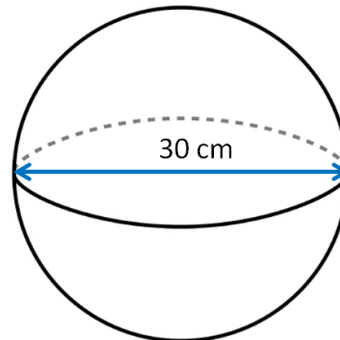
3.)

5 cm

10 cm
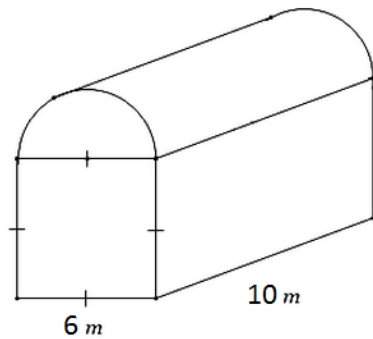
Surface Area = _____

Volume = _____

4.)

30 cm

Volume = _____

5.)

6.)

10 cm

4 cm

10 m
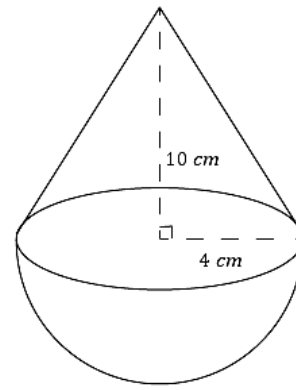
6 m

Volume = _____

Volume = _____

Review: Equations, Order of Operations, Proportional Reasoning, Real number system

7.)   -2 is which of the following:

   a) Natural   b) Whole   c) integer   d) rational   e) irrational f) real

8.) $-\frac{2}{3}$ is which of the following:

   a) Natural   b) Whole   c) integer   d) rational   e) irrational f) real

9.)   5 is which of the following:

   a) Natural   b) Whole   c) integer   d) rational   e) irrational f) real

10.)   0 is which of the following:

   a) Natural   b) Whole   c) integer   d) rational   e) irrational f) real

11.)   5.32 is which of the following:

   a) Natural   b) Whole   c) integer   d) rational   e) irrational f) real

12.) $\sqrt{5}$ is which of the following:

   a) Natural   b) Whole   c) integer   d) rational   e) irrational f) real

13.) solve for x: $\frac{x}{5} = \frac{4}{30}$

14.) solve for x: $\frac{x}{3.5} = \frac{4}{8}$

15.) Simplify: $-6^2 \div (\frac{1}{3})^2 - 2(2+1)$

16.) Solve for x: $\frac{4x}{5} + \frac{3}{2} = \frac{3x+5}{4}$

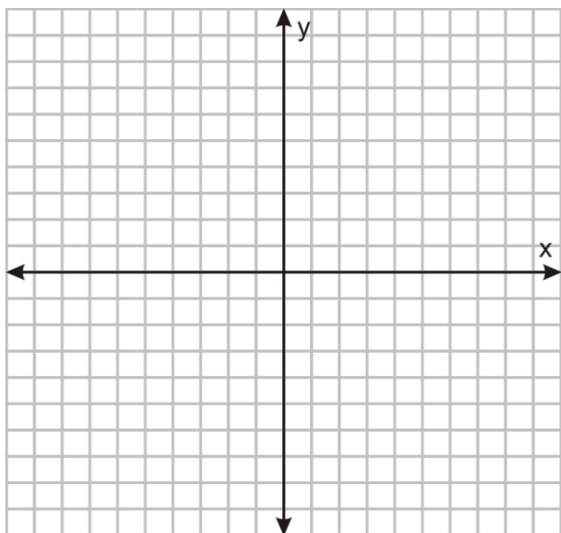17.) Solve for x: $\frac{x}{2} + \frac{3}{4} = \frac{2x+1}{4}$

18.) Simplify: $-5 - |-2 \cdot 4 + (-5)|$
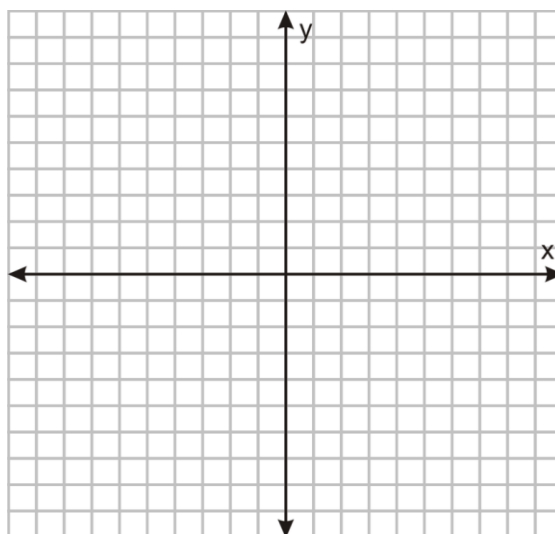
19.) Simplify: $-|2 - (-6)| - |-2 \cdot 4 - 5|$

20.) If 18 apples cost $4.68, compute cost per apple.
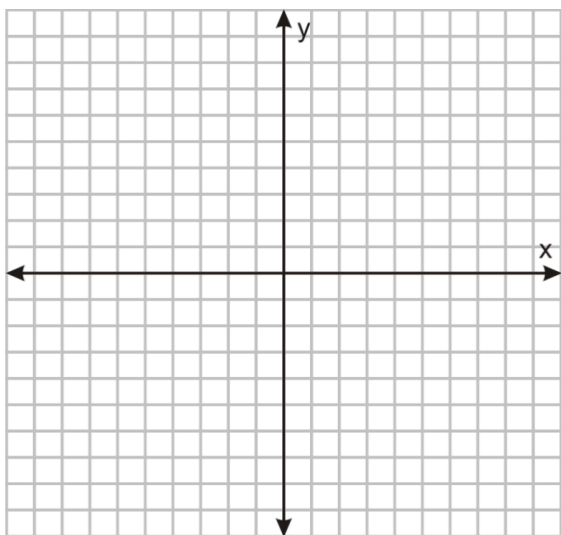
21.) If 23 pears cost $23.92, compute cost per pear.

22.) Graph: $y = -\dfrac{2}{3}x + 4$

23.) Graph: $y = \dfrac{1}{5}x - 2$

24.) Graph: $y = \dfrac{2}{5}x + 1$

25.) Graph: $y = -\dfrac{2}{5}x - 2$