

Show all your work. No work no credit

1. (2 each) Convert each of the following percents to fraction or mixed number reduced to lowest terms.

a) 6.25%

b) $6\frac{2}{3}\%$

2. (2 each) Convert each of the following percents to a decimal.

a) 0.25%

b) 600%

3. (2 each) Convert each of the following decimals to a percent

a) 0.375

b) 7

4. (2 each) Convert each of the following fractions to a percent. Round to the nearest tenth if necessary.

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

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

5. (2 pts) Find the complement of 35°

6. (2 pts) Find the supplement of 62°

7. (1 each) Identify the following angles as acute, obtuse, right, or straight.

a) 33°

b) 171°

c) 90°

d) 180°

8. (1 each) Find the measure of each angle.

1 =

5 =

2 =

6 =

3 =

7 =

4 =

9. (3 each) Find the area and perimeter of a square of side 9 cm.

a) Area

b) Perimeter

10. (3 each) Find the volume and surface area of the cylinder of radius 12 inches and height 22 inches. Use $\pi = 3.14$

a) Surface Area

b) Volume

11. (4 pts) Find the area of the following figure.

12. (4 pts) Find the area of the trapezoid of height $h = 13cm$, and bases, $b = 11cm$, $B = 21cm$.

13. (3 pts) Find the area of the parallelogram of height 7 inches and base 12 inches

14. (4 pts) Find the area of the triangle of height 8 yards and base 12 yards.

15. (3 each) Find the circumference and area of a circle of radius 6 inches. Use $\pi = 3.14$.

a) Area

b) Circumference

16. (4 pts) A pencil box measures 3 inches by 8 inches by $\frac{3}{4}$ inches high. Find the volume of the box.

17. (4 pts) Find the unknown length in the right triangle.

18. (2 each) Convert as instructed:

a) $15 \text{ in} = \text{---ft}$

b) $3 \text{ mi} = \text{---ft}$

c) $0.02 \text{ km} = \text{---mm}$

d) $0.07 \text{ m} = \text{---cm}$

19. (2 each) Convert as instructed:

a) $350 \text{ L} = \text{---mL}$

b) $3 \text{ pt} = \text{---qt}$

c) $4\frac{1}{4} \text{ gal} = \text{---qt}$

d) $500 \text{ L} = \text{---kL}$

20. (4 pts) Of the 4800 accidents, only 1% was caused by mechanical failure. How many accidents were caused by mechanical failure?

21. (4 pts) An antibiotic is used to treat 380 people. If 342 people do not have side effects from the antibiotic, find the portion that do have side effects.

22. (4 pts) What is 25% of \$970?

23. (5 pts.) (**Bonus**) Find the complement of the supplement of 150° .