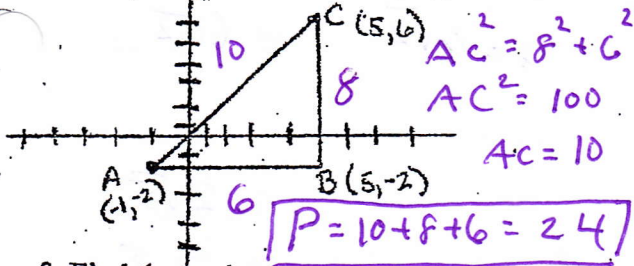
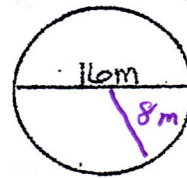


1. Find the perimeter of  $\triangle ABC$ .



2. Find the area of the circle.

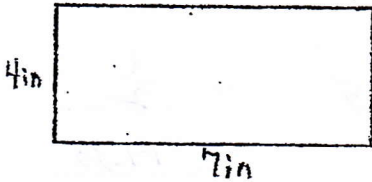


$A = \pi r^2 = 64\pi m^2$

1. 24

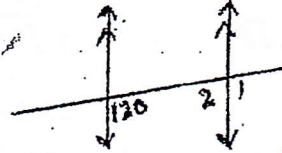
2.  $64\pi m^2$

3. Find the perimeter of the rectangle.



$P = 2(4+7)$   
 $P = 22$

4. Find the measures of  $\angle 1$  and  $\angle 2$ .



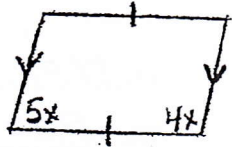
$\angle 1 = 120^\circ$  (corresponding  $\angle$ s)  
 $\angle 2 = 60^\circ$  (same-side interior  $\angle$ s)

$P = 22$

3. ~~120~~

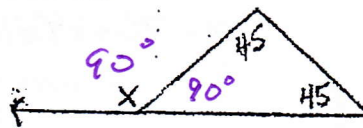
4.  $60^\circ$   $120^\circ$

5. Find the value of x.



$9x = 180^\circ$   
 $x = 20^\circ$

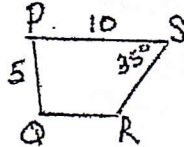
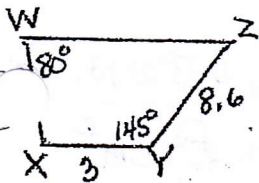
6. Find x.



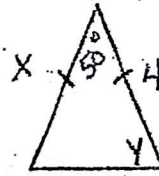
5. ~~20~~

6.  $90^\circ$

7. Find a)  $m\angle P$ , b)  $\overline{QR}$   
 $WXYZ \cong PQRS$



8. Solve for a)  $x = 4$ , b)  $y = 65^\circ$

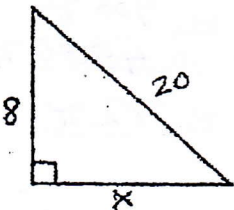


$2y = 180^\circ - 50^\circ$   
 $2y = 130^\circ$   
 $y = 65^\circ$

7.a  $80^\circ$   
b The answer is in the hole...

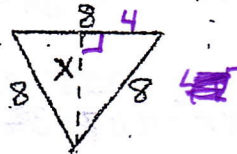
8.a 4  
b  $65^\circ$

9. Solve for x, keep in  $\sqrt{\quad}$  form.



$x^2 + 8^2 = 20^2$   
 $x^2 + 64 = 400$   
 $\quad \quad -64 \quad -64$   
 $x^2 = 336$

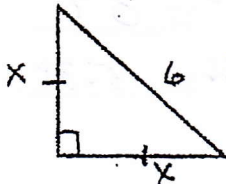
10. Solve for x. Note: x is the altitude (height).



9.  $18.33$  or  $4\sqrt{21}$

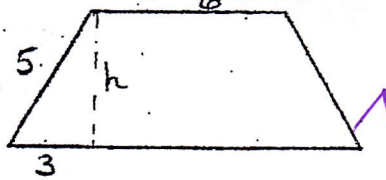
10.  $4\sqrt{3}$

11. Solve for x.



$x = \frac{6 \cdot \sqrt{2}}{\sqrt{2} \cdot \sqrt{2}} = 3\sqrt{2}$

12. Find the area of the trapezoid.



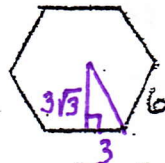
11.  $3\sqrt{2}$

12. Not enough information

13. Find the area of the rhombus.



14. Find the area of the regular hexagon. Keep answer in lowest radical form.



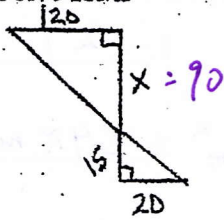
$A = \frac{1}{2} a s n$   
 $= \frac{1}{2} (3\sqrt{3})(6)(6)$

13. \_\_\_\_\_

14.  $54\sqrt{3}$

$A = 54\sqrt{3}$

15. Solve for x



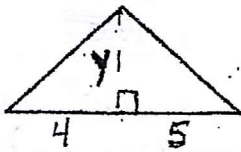
16. Find the geometric mean of 4 and 18.

$$\frac{4}{x} = \frac{x}{18} \quad x^2 = 72$$

$$x = 6\sqrt{2}$$

15. 90  
16.  $6\sqrt{2}$

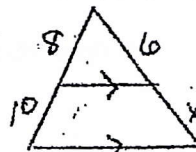
17. Solve for y.



$$\frac{4}{y} = \frac{y}{5}$$

$$y = 2\sqrt{5}$$

18. Solve for x.



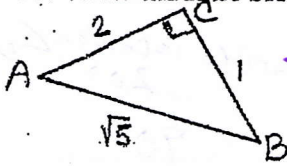
$$\frac{8}{10} = \frac{6}{x}$$

$$8x = 60$$

$$x = 7.5$$

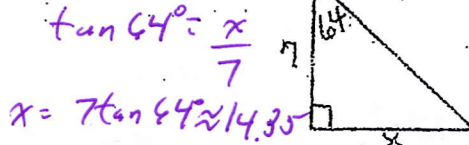
17.  $2\sqrt{5}$   
18. 7.5

19. Write tan ratio for  $\angle A$ .



$$\tan A = \frac{1}{2}$$

20. Solve for x.

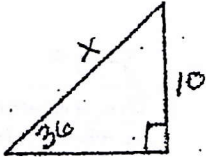


$$\tan 64^\circ = \frac{x}{7}$$

$$x = 7 \tan 64^\circ \approx 14.35$$

19.  $\frac{1}{2}$   
20. 14.35

21. Solve for x.

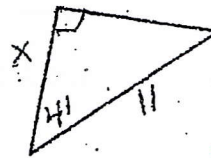


$$\sin 36^\circ = \frac{10}{x}$$

$$x = \frac{10}{\sin 36^\circ}$$

$$x \approx 17.01$$

22. Solve for x.



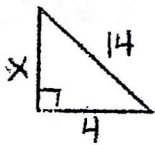
$$\cos 41^\circ = \frac{x}{11}$$

$$x = 11 \cos 41^\circ$$

$$x \approx 8.30$$

21. 17.01  
22. 8.30

23.



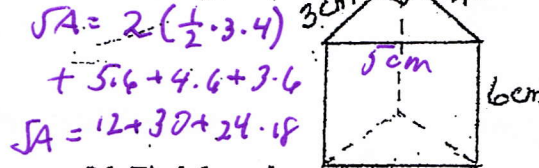
$$x^2 + 4^2 = 14^2$$

$$x^2 + 16 = 196$$

$$x^2 = 180$$

$$x = 6\sqrt{5}$$

24. Find the surface area of the Triangular prism.



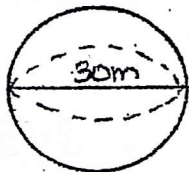
$$SA = 2 \left( \frac{1}{2} \cdot 3 \cdot 4 \right) + 5.6 + 4.6 + 3.6$$

$$SA = 12 + 30 + 24 = 66$$

23.  $6\sqrt{5} \approx 13.42$   
24. 66 cm<sup>2</sup>

25. a) Find the SA of the sphere

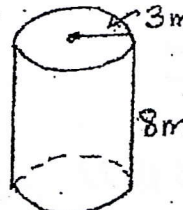
b) Find the volume



$$SA = 4\pi r^2 = 4\pi (30)^2 = 3600\pi$$

$$V = \frac{4}{3}\pi r^3 = \frac{4}{3}\pi (30)^3 = 36000\pi$$

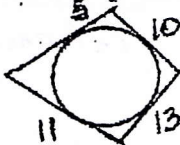
26. Find the volume.



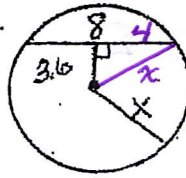
$$V = \pi r^2 h = 72\pi$$

- 25a.  $3600\pi$   
b.  $36000\pi$   
26.  $72\pi$

27. Find the perimeter.



28. Find x.



$$x^2 = 4^2 - 3.6^2$$

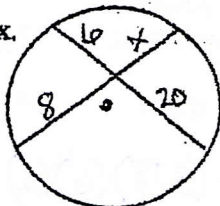
$$x^2 = 16 - 12.96$$

$$x^2 = 3.04$$

$$x \approx 1.76$$

27. 40  
28. 1.76

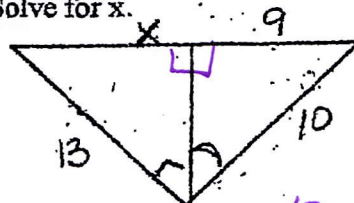
29. Solve for x.



$$8x = 120$$

$$x = 15$$

30. Solve for x.



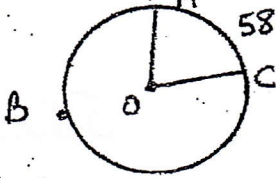
$$\frac{x}{9} = \frac{13}{10}$$

$$10x = 117$$

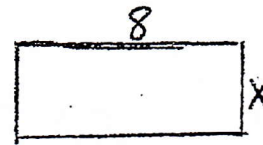
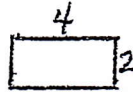
$$x = 11.7$$

29. 15  
30. 11.7

31. a) Find the minor arc, name and give degrees.  
 b) Find the major arc, name and give degrees.



32. Find x.  
 The rectangles are similar.



31. a)  $\widehat{AC}$   $58^\circ$   
 b)  $\widehat{ABC}$   $302^\circ$   
 32. 4

33. Write an example of the reflexive property:  $5=5$   
 34. Write an example of the symmetric property: If  $x=5$  then  $5=x$   
 35. Write an example of the transitive property: If  $a=b$  and  $b=c$  then  $a=c$   
 36. Write the following sentence as a conditional (using if-then statements):  
 A rectangle has four right angles.

If a shape is a rectangle then it has four right angles.

37. Draw and describe the following types of angles and write their relationship:

a. vertical angles: congruent

b. adjacent angles: supplementary  
( $=180^\circ$ )

c. complementary angles:  $=90^\circ$

d. supplementary angles:  $=180^\circ$

e. alternate interior angles: congruent

f. same-side interior angles:  $=180^\circ$

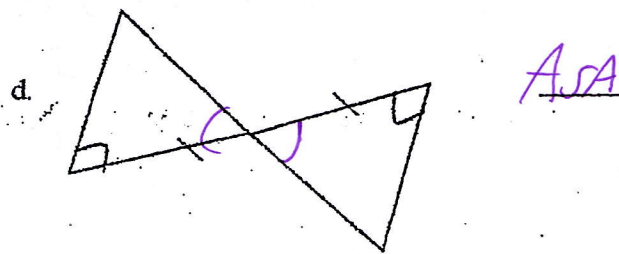
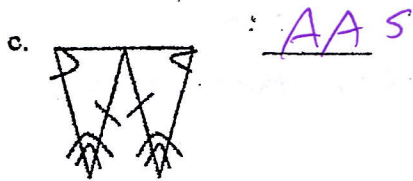
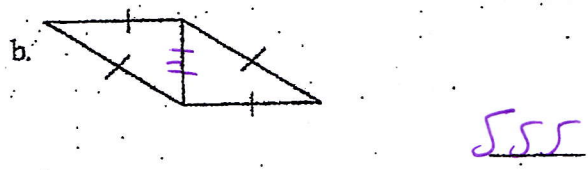
g. corresponding angles: congruent

What does this symbol mean? // parallel

What does this symbol mean?  $\perp$  perpendicular

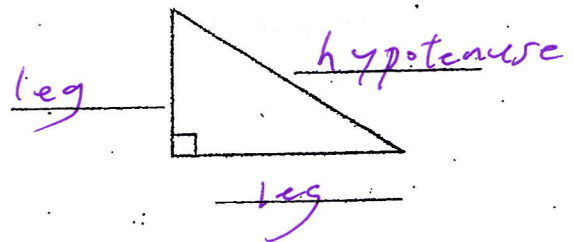


38. Name the triangle congruences:

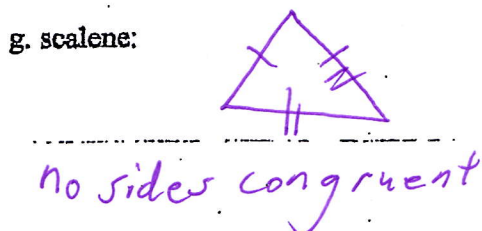
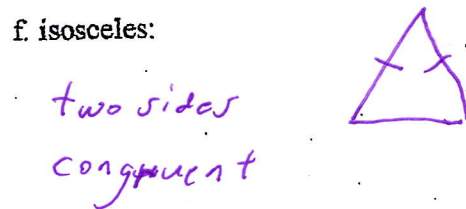
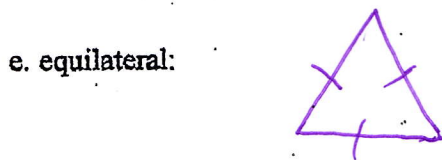
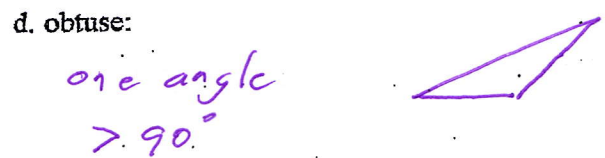
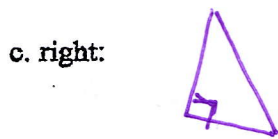
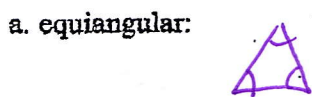


39. Label the correct parts of the right triangle:  
Leg, hypotenuse, a, b, c,  
Write the Pythagorean theorem

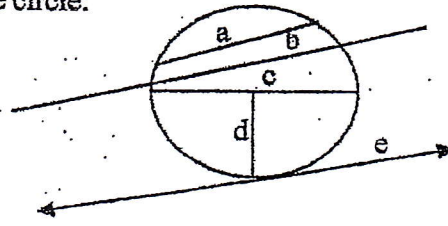
$$a^2 + b^2 = c^2$$



40. Draw and describe the following types of triangles:



41. Name the labeled parts of the circle:



- a. chord
- b. secant
- c. diameter
- d. radius
- e. tangent

100

Handwritten notes at the top of the page, including the word "Introduction" and some illegible text.

