Geometry
Chapter 11 test REVIEW

Please Return

Name Key
Date _____ Hour _____

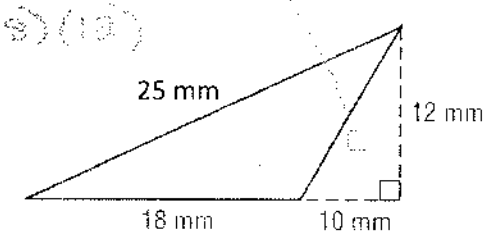
THIS IS DUE THE DAY OF THE TEST FOR POINTS

1. Find the area and perimeter of the shaded triangle shown below.

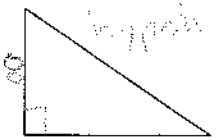
A = _____

P = _____

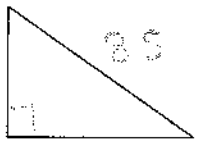
Round to the nearest tenth



2. A right triangle has legs of lengths 8 feet and 21 ft. What is the area of the right triangle?



3. A right triangle has a leg that measures 84 inches and a hypotenuse that measures 85 inches. What is the area of the triangle?



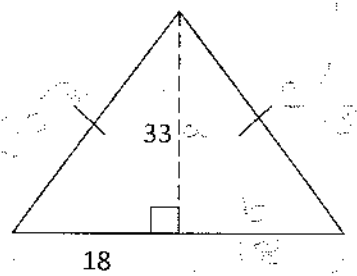
4. The base of a triangle is 5 times its height. If the area of a triangle is 72 square inches, find its height.

5. Find the area and perimeter of the triangle shown below. Round to the nearest tenth.

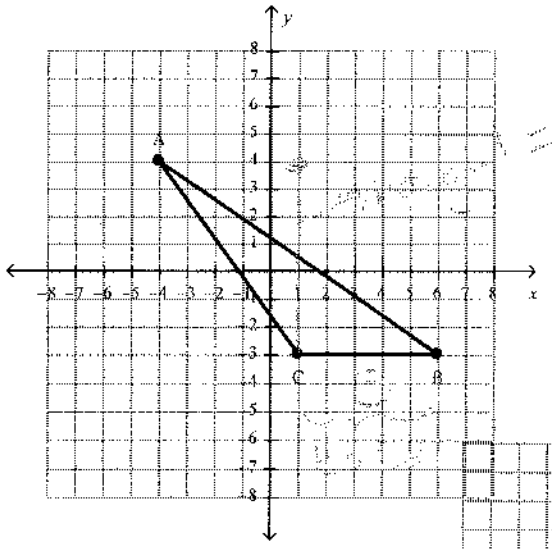
Hint: What type of triangle is this?
How can you tell?

A = _____

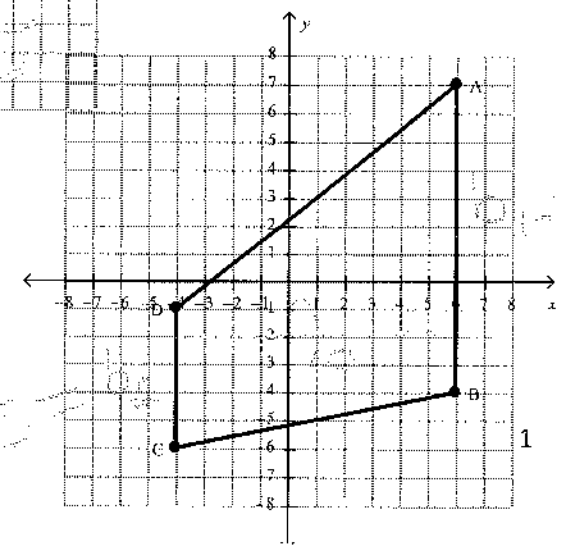
P = _____



6. Find the area of triangle ABC shown below.



7. Find the area of trapezoid ABCD shown at the right.



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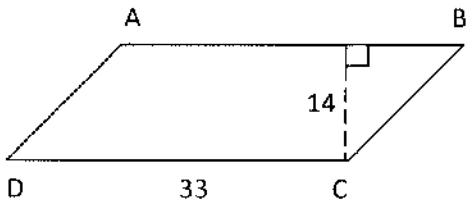
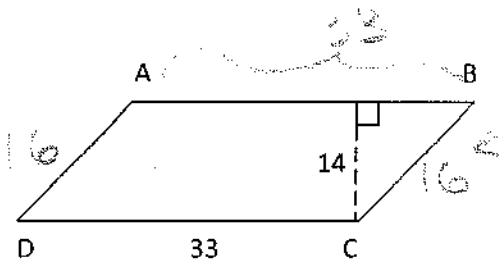
8. Find the area of the parallelogram ABCD.



$A = bh$
$A = (33)(14)$
$= 462$

9. Find the perimeter of the parallelogram ABCD, if the length of BC = 16.

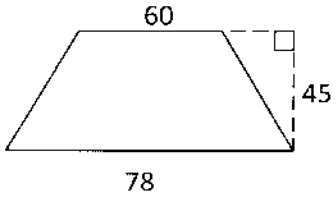


$33 + 33 + 16 + 16$
$= 98$

10. The area of a parallelogram is 156 square feet and its base is 13 feet. Find its height. Round to the nearest tenth.

$A = bh$
$156 = 13h$
$\frac{156}{13} = \frac{13h}{13}$
$h = 12$

11. Find the area of the trapezoid. Round to the nearest tenth.

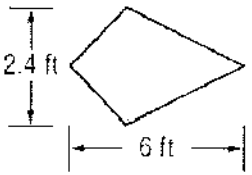


$A = \frac{1}{2}h(b_1 + b_2)$
$A = \frac{1}{2}(45)(60 + 78)$
$A = \frac{1}{2}(45)(138)$
$A = 3105$

12. A trapezoid has base lengths of 6 and 29 feet, with an area of 122.5 square feet. What is the length of the altitude of the trapezoid?

$A = \frac{1}{2}h(b_1 + b_2)$
$122.5 = \frac{1}{2}h(6 + 29)$
$122.5 = 17.5h$
$h = 7$

13. Find the area of the kite. Round to the nearest tenth.

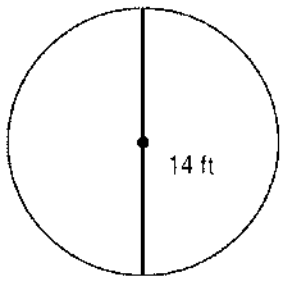


$A = \frac{1}{2}d_1d_2$
$A = \frac{1}{2}(2.4)(6)$
$A = 7.2$

14. A rhombus has an area of 378 square units. If the length of one diagonal is 21 units. Find the length of the other diagonal.

$A = \frac{1}{2}d_1d_2$
$378 = \frac{1}{2}(21)d_2$
$378 = 10.5d_2$
$d_2 = 36$

15. Find the area of the circle. Round to the nearest tenth.



$r = 7$
$A = \pi r^2$
$A = \pi(7)^2$
$A = 153.9$

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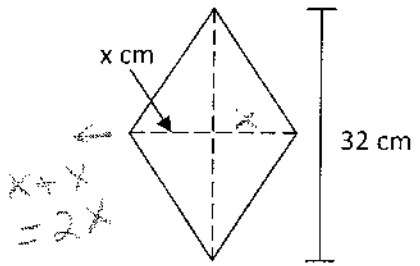
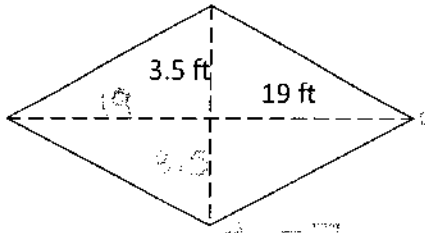
16. Find x if the area of the rhombus is 800 cm^2.



$A = \frac{1}{2}(d_1)(d_2)$
$800 = \frac{1}{2}(32)(2x)$
$800 = 32x$
$x = 25$

17. Find the area of the rhombus.



$A = \frac{1}{2}d_1d_2$
$= \frac{1}{2}(7)(38)$
$= 133$

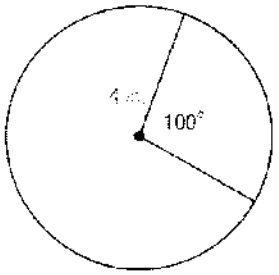
18. Find the area of a circle with a circumference of 60π units. Round to the nearest tenth.

$C = 60\pi$
$C = \pi d$
$60 = d$
$r = 30$
$A = \pi r^2$
$= \pi(30)^2$
$= 900\pi$
≈ 2827.4

19. The area of a circle is 254.469 square feet. What is the length of its radius? Round to the nearest whole number.

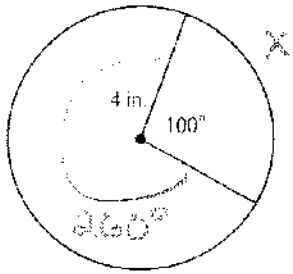
$A = \pi r^2$
$254.469 = \frac{\pi r^2}{\pi}$
$81 = r^2$
$r = 9$

20. What is the area of the shaded sector? Round to the nearest hundredth.



$\frac{A}{360} = \frac{100}{360}$
$\frac{100}{360} \cdot \pi \cdot 4^2$
3.96

21. What is the area of the non-shaded sector? Round to the nearest hundredth.

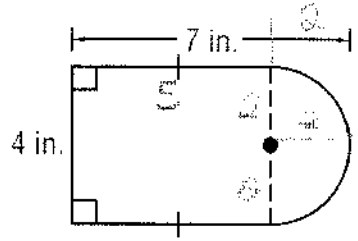


$x = 360 - 100 = 260$
$\frac{260}{360} \cdot \pi \cdot 4^2$
36.30

22. A circular pizza has a diameter of 20 inches. Each slice of pizza has a central angle of 30°. What is the area of each slice of pizza? Round to the nearest hundredth.

$d = 20$
$r = 10$
$x = 30$
$\frac{x}{360} \cdot \pi \cdot r^2$
$\frac{30}{360} \cdot \pi \cdot 10^2$
26.18

23. Find the area of the figure. Round to the nearest tenth.



$5 \times 4 + \frac{1}{2}\pi \cdot 3^2$
$20 + 14.137$
34.3

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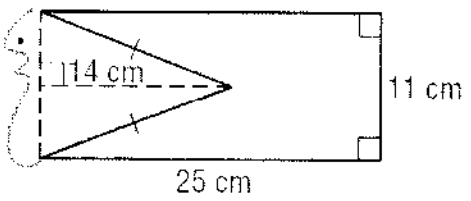
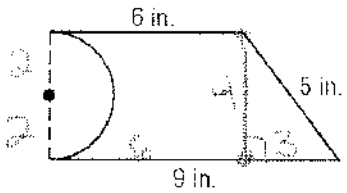
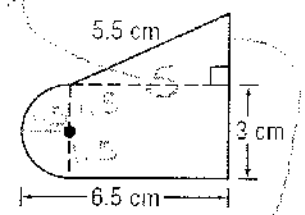
24. Find the area of the figure. Round to the nearest tenth.



25. Find the area of the figure. Round to the nearest tenth.



26. Find the area of the figure. Round to the nearest tenth.



Scrambled Answers

198	13.96	462	7
133	108	98	17.5
111.2	7.2	23.7	58.6
594	9	12	36
24.3	36.30	3105	153.9
546	84	26.18	25
5.4	80	2827.4	26.3

- The tests is 25 multiple choice questions and 3 short answer extra credit problems

Formulas you should have memorized for the test:

Area of a:

Triangle $A = \frac{1}{2}bh$

Parallelogram $A = bh$

Trapezoid $A = \frac{1}{2}h(b_1 + b_2)$

Rhombus or Kite $A = \frac{1}{2}d_1d_2$

Circle $A = \pi r^2$

Circumference of a circle $C = 2\pi r \text{ or } \pi d$

Area of a sector $A = \frac{x}{360}\pi r^2$ (This one is on the test.)