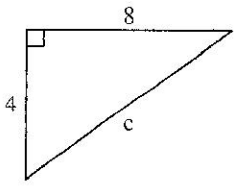
Name: _____ Class: _____ Date: _____ ID: A

3rd 9 Weeks Test 2 Study Sheet 2

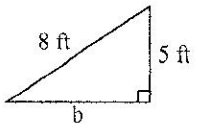
CANNOT USE CALCULATORS ON #1-18 (THIS PAGE)

Short Answer

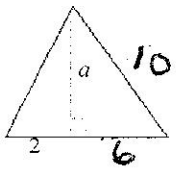
1. What are the two square roots of the number 196?
2. A piece of wood is to be cut so that it is square and has an area of 121 square inches. How long should the sides be?
3. What are the two square roots of the number 225?
4. What two integers is $\sqrt{123}$ between?
5. What two integers is $\sqrt{150}$ between?
6. Which integer is $\sqrt{42}$ closest ?
7. Which integer is $\sqrt{58}$ closest ?
8. A square mosaic is made of small pieces of glass. If there are 81 pieces of glass, how many are along one edge?
9. A square room has a tiled floor with 144 tiles. How many tiles are along one edge?
10. Find the length of the hypotenuse of the triangle exactly (do not round).



11. Find the length of the unknown side in the right triangle exactly (do not round).



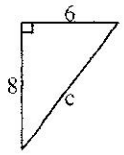
12. Use the Pythagorean Theorem to find the height of the triangle. Then use the height to find the area of the triangle to the nearest whole number.



13. Find the **circumference** of a circle with radius 9 in., in terms of π.
14. Find the **circumference** of a circle with diameter 13 ft, in terms of π.
15. Find the **area** of a circle with diameter 12 m, in terms of π.
16. Find the **area** of a circle with radius 14 m, in terms of π.
17. Find the distance between the two points.
    $(d = \sqrt{\Delta x^2 + \Delta y^2})$
    (3, –3), (–2, 1)
18. Find the distance between the two points.
    $(d = \sqrt{\Delta x^2 + \Delta y^2})$
    (5, –4), (–2, 1)

Name: _____ USE CALCULATORS ON # 19-36. ID: A

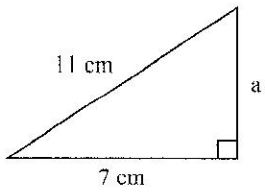
19. Find the length of the hypotenuse of the triangle to the nearest tenth.



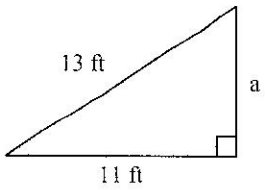
20. A piece of wood is to be cut so that it is square and has an area of 136 square inches. How long should the sides be, rounded to the nearest tenth of an inch?

21. A piece of wood is to be cut so that it is square and has an area of 82 square inches. How long should the sides be, rounded to the nearest tenth of an inch?

22. Find the length of the unknown side in the right triangle to the nearest tenth.



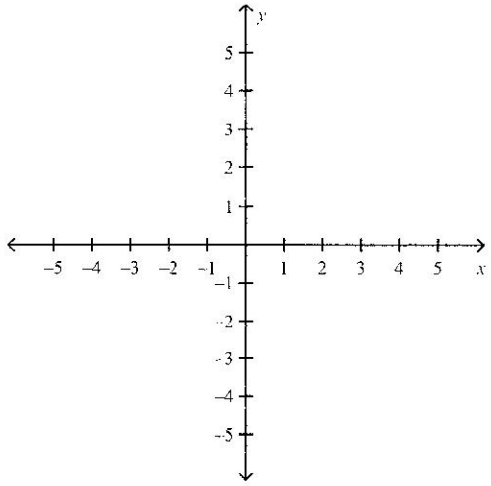
23. Find the length of the unknown side in the right triangle to the nearest tenth.



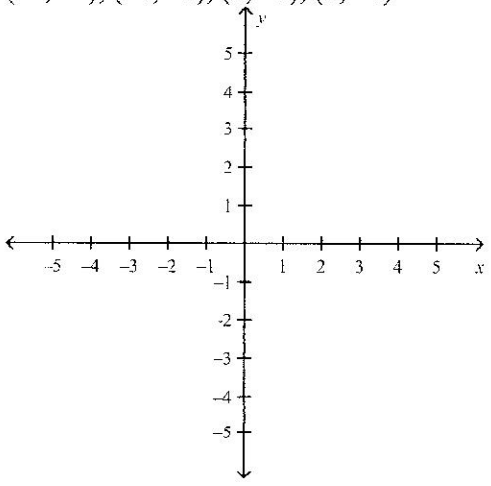
24. Find the circumference of a circle with diameter 38 m, both in terms of π and to the nearest tenth. Use 3.14 for π.

25. Find the circumference of a circle with diameter 11 ft, both in terms of π and to the nearest tenth. Use 3.14 for π.

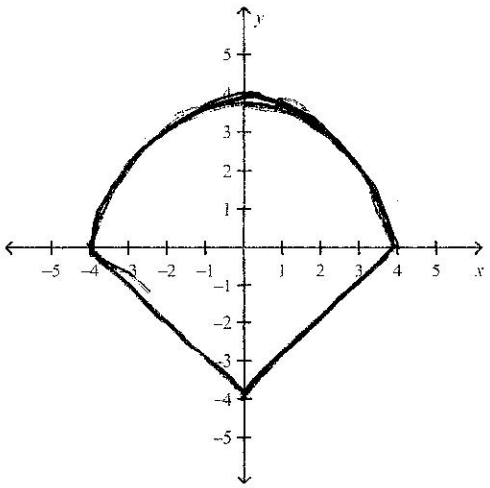
26. Graph and find the area of the figure with the given vertices.
(–2, –2), (0, 0), (3, –2)



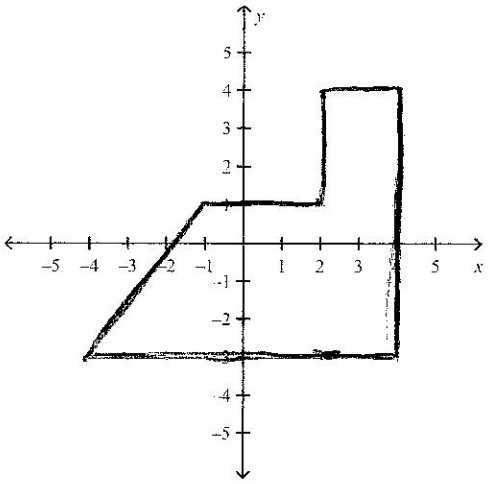
27. Graph and find the area of the figure with the given vertices.
(–1, –4), (–1, –1), (1, –1), (4, –4)



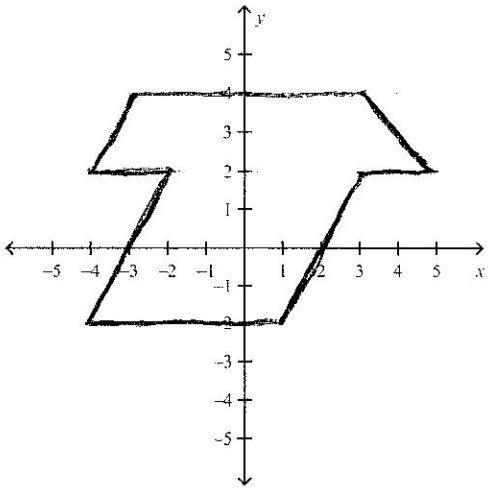
28. Find the area of the composite figure. If necessary, round to the nearest tenth.



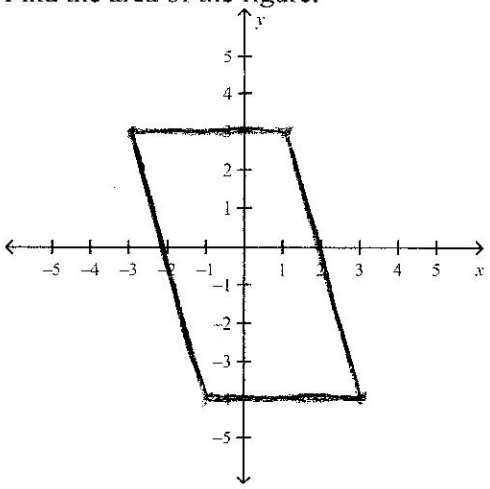
29. Find the area of the composite figure. If necessary, round to the nearest tenth.



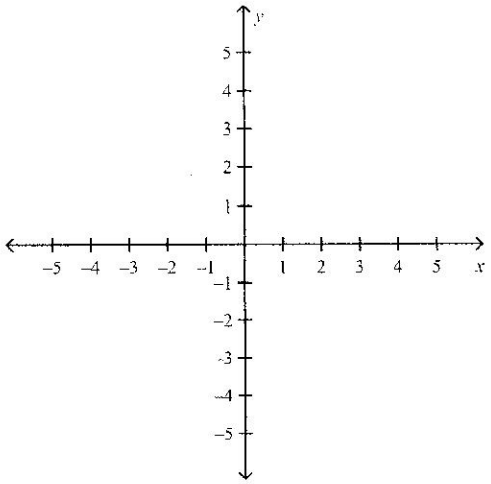
30. Find the area of the composite figure. If necessary, round to the nearest tenth.



31. Find the area of the figure.



32. Graph the figure with the given vertices. Then find the area of the figure.
(–2, –2), (–1, 3), (5, 3), (4, –2)



33. Find the distance between the two points.
$(d = \sqrt{\Delta x^2 + \Delta y^2})$
(–1, 1), (4, –4)

34. Find the distance between the two points.
$(d = \sqrt{\Delta x^2 + \Delta y^2})$
(–2, 2), (0, –3)

35. Find the area of a circle with diameter 44.4 mm, both in terms of π and to the nearest tenth. Use 3.14 for π.

36. Find the area of a circle with radius 11.2 m, both in terms of π and to the nearest tenth. Use 3.14 for π.