

3rd 9 Weeks Test 2 Study Sheet

CANNOT USE CALCULATORS
ON # 1-16 (THIS PAGE)

Short Answer

1. What are the two square roots of the number 144?

2. A piece of wood is to be cut so that it is square and has an area of 196 square inches. How long should the sides be?

3. What are the two square roots of the number 169?

4. What two integers is $\sqrt{107}$ between?

5. What two integers is $\sqrt{174}$ between?

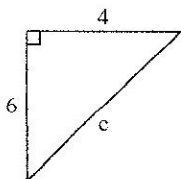
6. Which integer is $\sqrt{57}$ closest ?

7. Which integer is $\sqrt{149}$ closest ?

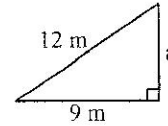
8. A square mosaic is made of small pieces of glass. If there are 225 pieces of glass, how many are along one edge?

9. A square room has a tiled floor with 81 tiles. How many tiles are along one edge?

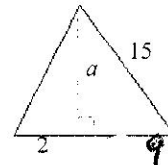
10. Find the length of the hypotenuse of the triangle exactly (do not round).



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 6 ft, in terms of π .

14. Find the circumference of a circle with diameter 8 in., in terms of π .

15. Find the area of a circle with radius 11 m, in terms of π .

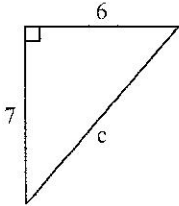
16. Find the area of a circle with diameter 14 ft, in terms of π .

CAN USE CALCULATORS ON #17-36

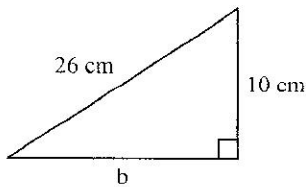
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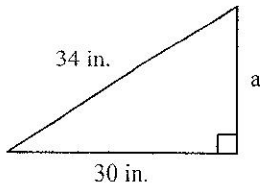
17. Find the length of the hypotenuse of the triangle to the nearest tenth.



18. A piece of wood is to be cut so that it is square and has an area of 114 square inches. How long should the sides be, rounded to the nearest tenth of an inch?
19. A piece of wood is to be cut so that it is square and has an area of 18 square inches. How long should the sides be, rounded to the nearest tenth of an inch?
20. Find the length of the unknown side in the right triangle to the nearest tenth.



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

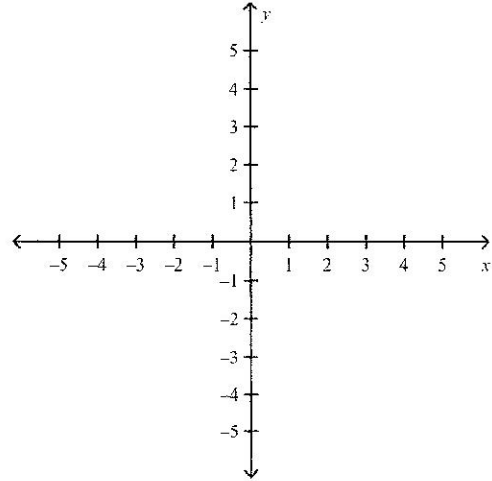


22. Find the circumference of a circle with diameter 25 in., both in terms of π and to the nearest tenth. Use 3.14 for π .

23. Find the circumference of a circle with diameter 12 in., both in terms of π and to the nearest tenth. Use 3.14 for π .

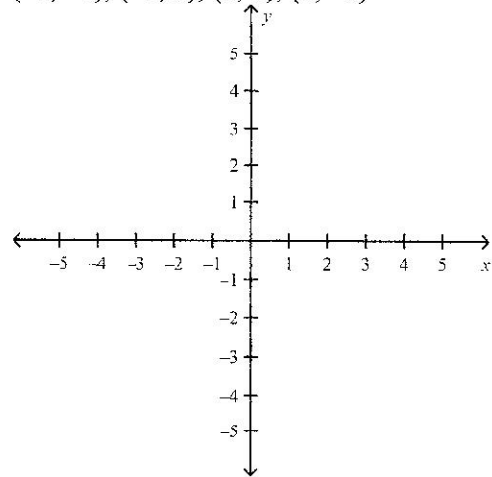
24. Graph and find the area of the figure with the given vertices.

$(-1, -2), (2, 1), (5, -2)$



25. Graph and find the area of the figure with the given vertices.

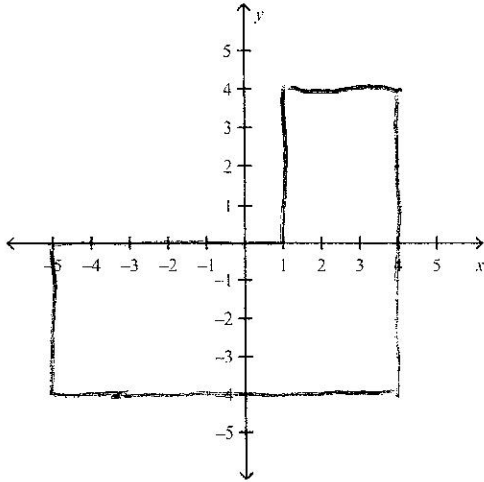
$(-1, -1), (-1, 3), (1, 3), (2, -1)$



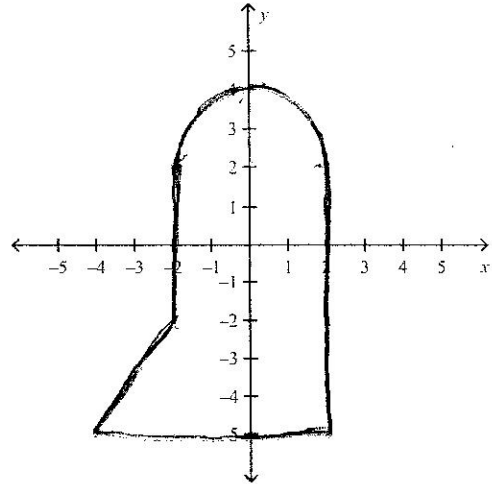
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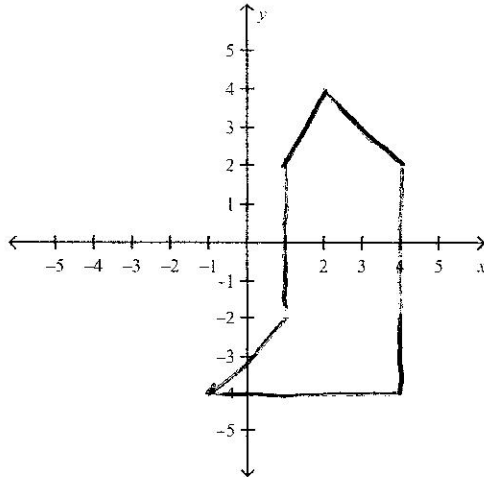
26. Find the area of the composite figure. If necessary, round to the nearest tenth.



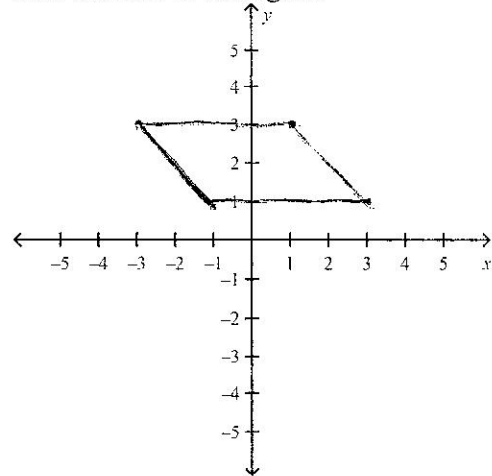
28. Find the area of the composite figure. If necessary, round to the nearest tenth.



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

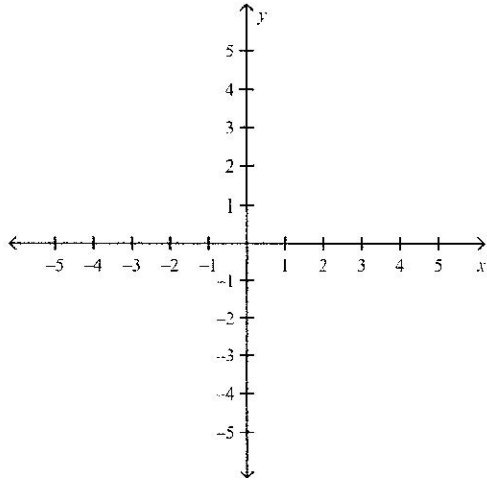


29. Find the area of the figure.



30. Graph the figure with the given vertices. Then find the area of the figure.

$(-2, -2), (-1, 3), (5, 3), (4, -2)$



31. Find the distance between the two points.

$$(d = \sqrt{\Delta x^2 + \Delta y^2})$$

$(-2, -2), (-3, 1)$

32. Find the distance between the two points.

$$(d = \sqrt{\Delta x^2 + \Delta y^2})$$

$(-3, -4), (-3, 1)$

33. Find the distance between the two points.

$$(d = \sqrt{\Delta x^2 + \Delta y^2})$$

$(-2, 3), (3, -1)$

34. Find the distance between the two points.

$$(d = \sqrt{\Delta x^2 + \Delta y^2})$$

$(-2, 1), (2, -3)$

35. Find the area of a circle with radius 16.2 mm, both in terms of π and to the nearest tenth. Use 3.14 for π .

36. Find the area of a circle with diameter 46 m, both in terms of π and to the nearest tenth. Use 3.14 for π .