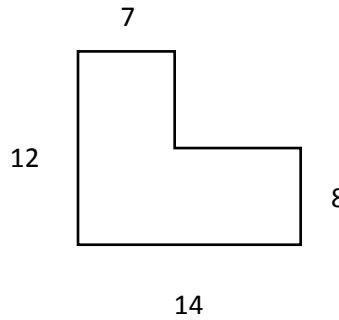
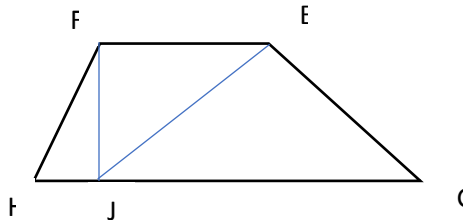


Area and Perimeter Practice

1. A scale drawing of Lenny's kitchen floor is shown below. The given dimensions are all in feet, and all corners represent 90° angles. Lenny wants to put square tiling flooring down in his kitchen floor to give it an old retro style look. Each tile will have a side length of 1 foot, and no partial tiles will be installed. How many tiles will Lenny need to cover the kitchen floor?



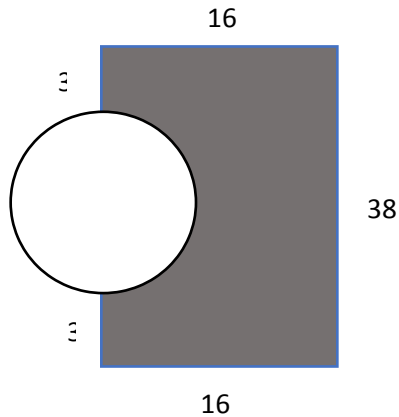
- a. 84
b. 96
c. 112
d. 140
e. 168
2. In the figure below, FEGH is a trapezoid. Line FJ, which is 8 cm long, is perpendicular to line HG, which is 36 cm long. Given that the area of the right triangle FJE is 40 square centimeters, what is the area, in square centimeters, of trapezoid FEGH?



- a. 184
b. 200
c. 264
d. 304
e. 608
3. What is the area in square nanometers, of a right triangle with side lengths of 40 nm, 32 nm, 24 nm?
- a. 960
b. 720
c. 630

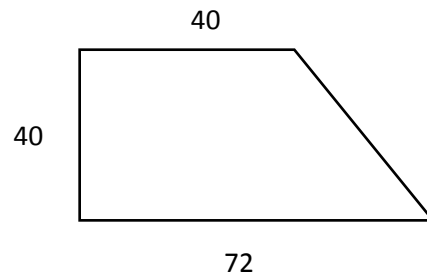
- d. 540
- e. 480

4. Todd is building a deck and a pool in a client's yard. The deck's shape is a rectangle with a semicircle removed where the pool is as shown in the diagram below. All the lengths of the deck are marked below in feet. Todd is going to build the deck out of concrete and needs to know what the area of the deck is in order to calculate the amount of concrete he needs to purchase. What is the area of the deck as shown below to the nearest square foot?



- a. 114
 - b. 206
 - c. 224
 - d. 312
 - e. 400
5. A 4-inch-wide frame is placed around a rectangular picture. The outside edge of the frame measures 24 inches by 28 inches as shown in the figure below. What is the perimeter of the picture inside the frame?
- a. 52
 - b. 72
 - c. 94
 - d. 320
 - e. 672
6. A rectangle has an area 48 square centimeters and a perimeter of 28 square centimeters. What is the longest of the side lengths, in centimeters, of the rectangle?
- a. 1
 - b. 3
 - c. 6
 - d. 8
 - e. 16

7. Desiree needs to make a recreation of a rectangular billboard advertisement. The billboard is 10 feet long by 5 feet wide. The recreation that will be turned into a poster advertisement will have an area that is 20% of the billboard's area. The length of the poster will be $\frac{1}{2}$ of the length of the billboard. How many feet wide will the poster be?
- a. 2
 - b. 2.5
 - c. 3
 - d. 3.5
 - e. 5
8. The floorplan for Bobby's dog house is shown in the picture below; the dimensions given are in inches. Bobby is placing a water sealant around the edges of the floor along each wall (shown in the floorplan by solid lines). According to this floorplan, which of the following is the distance in inches of the perimeter of the dog house?



- a. 180
- b. 194
- c. 202
- d. 244
- e. 312