

## Assignment 3.1 (Surface Area)

Name \_\_\_\_\_

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### Convert the following units

1) 6 feet into inches

2) 14 feet into yards

3) 7000 yards into miles

4) 3.4 miles into feet

5) 200 inches into yards, feet, and inches

6) 16 ft into metres

7) 13 kilometres into miles

8) 60cm into inches

9) 400 inches into metres

10) 6200 metres into miles

11) 5 square yards into square feet

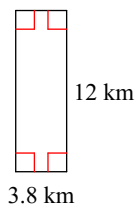
12) 1 000 000 sq yards into square miles

13) 800 square feet into square metres

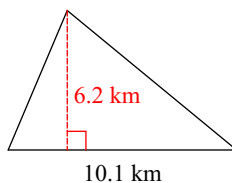
14)  $2 \text{ km}^2$  into square yards

Find the area of each.

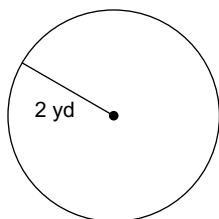
15)



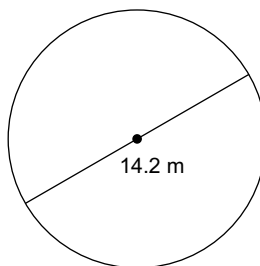
16)



17)

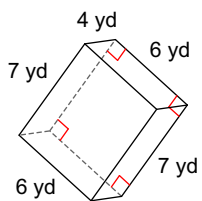


18)

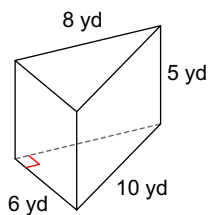


Find the surface area of each figure. Round your answers to the nearest hundredth, if necessary.

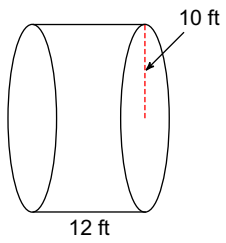
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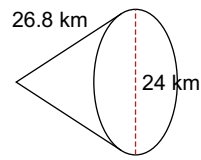
20)



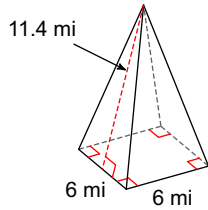
21)



22)



23)



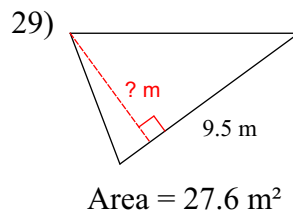
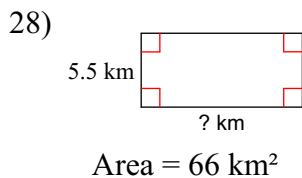
24) Fabric costs \$2.89 per foot. Determine the cost of 6 yards of fabric.

25) Drainage piping costs \$0.69 per foot. Determine the cost for 8 metres.

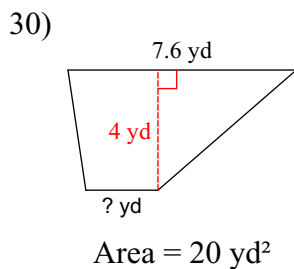
- 26) Jimmy needs to put base boards up around his room. The room is 12' x 10'. The door is 3' wide.
- Determine the amount of base board that is needed.
  - The base board costs \$2.89 per foot. Determine the cost.

- 27) Jimmy needs to put base boards up around his room. The room is 14'8" x 11'5". The door is 3' wide.
- Determine the amount of base board, in feet and inches, that is needed.
  - The base board costs \$2.89 per foot. You cannot buy a fraction of a foot. Determine the cost.

**Find the missing measurement. Round your answer to the nearest tenth.**



**Find the missing measurement.**



**Find the radius for the circle with the given area.**

31) area =  $201.1 \text{ in}^2$

## Answers to Assignment 3.1 (Surface Area)

- |                            |                   |                       |                  |
|----------------------------|-------------------|-----------------------|------------------|
| 1) 72"                     | 2) 4.67 yds       | 3) 3.98 miles         | 4) 17952'        |
| 5) 5 yards, 1 ft, 8 inches | 6) 4.88m          | 7) 8.07 miles         |                  |
| 8) 23.62"                  | 9) 10.16m         | 10) 3.85 miles        | 11) 45 sq feet   |
| 12) 0.32 sq miles          | 13) $74.32 m^2$   | 14) 2393003 sq yds    | 15) $45.6 km^2$  |
| 16) $31.31 km^2$           | 17) $12.6 yd^2$   | 18) $158.4 m^2$       | 19) $188 yd^2$   |
| 20) $168 yd^2$             | 21) $1382.3 ft^2$ | 22) $1462.73 km^2$    | 23) $172.8 mi^2$ |
| 24) \$52.02                | 25) \$18.11       | 26) a.41' b. \$118.49 |                  |
| 27) a.49'2" b. \$144.50    | 28) 12 km         | 29) 5.8 m             |                  |
| 30) 2.4 yd                 | 31) 8 in          |                       |                  |