Area 4.2
Geometry

Find the missing measure.

1) Trapezoid
b = 14 cm
b = 11 cm
h = 9 cm
Area =

2) Triangle
b =
h = 19 mm
Area = 114 mm^2

3) Rectangle
b = 32 ft
h =
Area = 704 ft^2

4) Trapezoid
b = 21 in
b = 15 in
h =
Area = 270 in^2

5) Trapezoid
b =
b = 4 mm
h = 6 mm
Area = 27 mm^2

6) Triangle
b = 16 dm
h =
Area = 48 dm^2

7) Parallelogram
b = 14 km
h =
Area = 266 km^2

8) Trapezoid
b = 35 m
b =
h = 21 m
Area = 1,428 m^2

9) Circle
radius =
diameter = 62 in
Circum. =
=
Area =
=

10) Circle
radius =
diameter =
Circum. =

Area = 45 mm^2 =

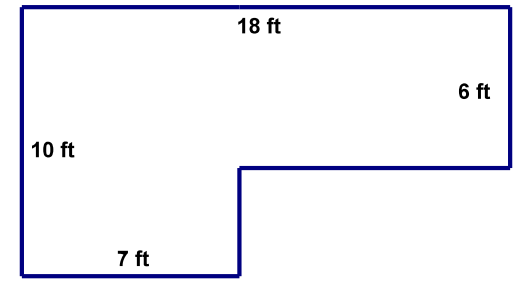
11) Circle
r =
d =
C = 65π m

A =
=

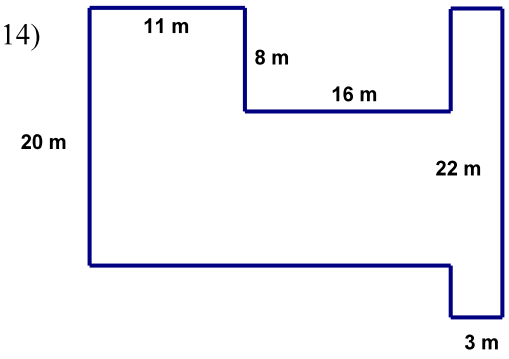
12) Circle
r =
d =
C =
=
A = 99 ft^2

Find the area of each figure.

13)

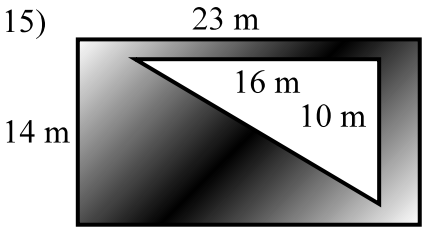


14)



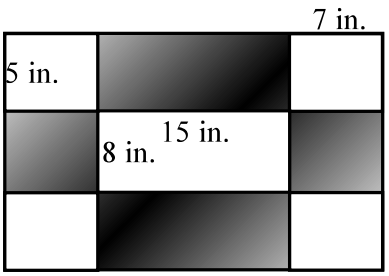
Find the area of the shaded region.

15)



(The rectangles in the corners are congruent.)

16)



Richard is a grounds keeper. A lawn for which he is responsible has suffered from a recent drought making it necessary to reseed. The dimensions of the lawn are 140 ft x 80 ft.

17) What is the area of the lawn?

18) If a bag of seed will seed 1500 ft^2, how many bags of seed will Richard need to reseed the lawn?

19) If a bag of seed costs $2.17, how much will Richard spend on seed?

20) If a bag of seed costs $3.85, how much will Richard spend on seed?

The owners of a gym are having their weight room floor covered with rubber mats. The dimensions of the gym are 68 ft x 80 ft. Each mat measures 4 ft by 4 ft.

21) What is the area of the floor? What is the area of each mat?

22) How many mats will be needed to cover the floor? What question helps us with this calculation?

23) How much will this project cost if the price of each mat is $5.40?

24) How much will this project cost if the price of each mat is $11.50?

25) If a skydiver parachutes onto the football field during half-time, what is the probability that he lands on the field between the 30 yard lines?

26) Bob and John are dropping pennies on a board that has 36 squares in 9 columns and 4 rows. What is the probability that a penny lands on a square in the 3rd row? What is the probability that a penny lands in the 1st or 7th column?

27) A large maple tree is surrounded by a lawn whose dimensions are 50 ft by 50 ft.. What is the probability that the first maple seed from the tree will land in a given 5 ft. by 10 ft. area in the lawn? What is the probability the seed will land in a 2.5 ft. by 20 ft block? How do these probabilities compare? Why?

28) A young vandal shoots a paintball at the wall of a building whose dimensions are 20 ft. by 15 ft.. What is the probability he hits a given 2 ft. by 3 ft rectangle? What about a 4 ft. by 3 ft. rectangle? How do these probabilities compare? Why? (Extra Credit: How long does he spend in juvenile detention when caught?)