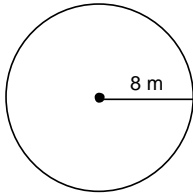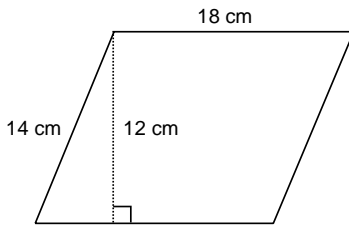# Practice Test#2

Multiple Choice
Identify the choice that best completes the statement or answers the question.
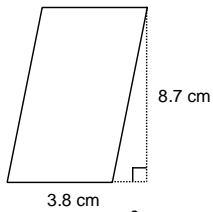
_____ 1. A circle has diameter 22 cm. What is the radius?
   a.   22 cm   b.   88 cm   c.   44 cm   d.   11 cm

_____ 2. A circle has radius 29.5 cm. What is the diameter?
   a.   59 cm   b.   88.5 cm   c.   9.8 cm   d.   14.75 cm

_____ 3. Calculate the circumference of this circle. Round your answer to one decimal place.

   a.   50.3 m   b.   201.1 m   c.   100.5 m   d.   25.1 m

_____ 4. A circle has a circumference of 32.4 mm.
   Find the radius and the diameter. Round your answers to two decimal places.
   a.   5.16 mm; 10.31 mm   c.   5.16 mm; 2.58 mm
   b.   10.31 mm; 5.16 mm   d.   2.58 mm; 5.16 mm

_____ 5. Find the area of this parallelogram.

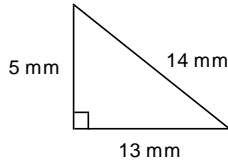   a.   252 cm^2 b.   216 cm^2 c.   168 cm^2 d.   64 cm^2
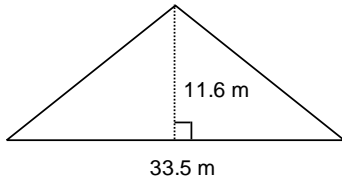
_____ 6. Find the area of this parallelogram.

   a.   66.12 cm^2 b.   25 cm^2 c.   33.06 cm^2 d.   12.5 cm^2

_____ 7. Find the area of this right triangle.

5 mm · 14 mm · 13 mm

a. 32 mm^2　　　　b. 65 mm^2　　　　c. 32.5 mm^2　　　　d. 227.5 mm^2

_____ 8. Find the area of this triangle.
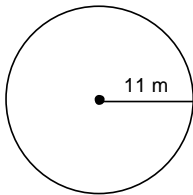

11.6 m · 33.5 m

a. 194.3 m^2　　　　b. 777.2 m^2　　　　c. 388.6 m^2　　　　d. 67.28 m^2

_____ 9. A rectangular piece of fabric measures 68 cm by 96 cm. A triangular scarf with height 15 cm and base 30 cm is cut from the fabric. How much fabric is left?
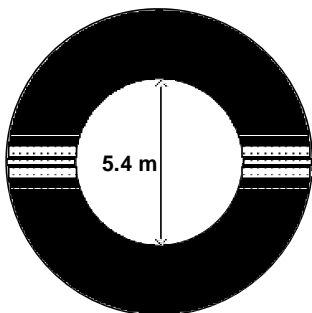a. 6303 cm^2　　　　b. 6753 cm^2　　　　c. 6078 cm^2　　　　d. 6303.5 cm^2

_____ 10. Find the area of this circle. Round your answer to two decimal places.

11 m

a. 380.13 m^2　　　　b. 1520.53 m^2　　　　c. 34.56 m^2　　　　d. 69.12 m^2

Short Answer

11. A tract of land has the shape of a parallelogram.
The area is 1376 m^2 and the base is 43 m. What is the height?

12. A large pizza has diameter 36 cm and a medium pizza has diameter 30 cm.
What is the difference in area of the pizzas?
Round your answer to the nearest square centimetre.

13. This diagram shows the top view of a deck surrounding a circular hot tub.
What is the area of the deck? Round your answer to one decimal place. Show your work.

5.4 m

Practice Test#2
Answer Section

MULTIPLE CHOICE

    1. ANS: D   PTS: 1   DIF: Easy   REF: 4.1 Investigating Circles
        LOC: 7.SS1   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    2. ANS: A   PTS: 1   DIF: Easy   REF: 4.1 Investigating Circles
        LOC: 7.SS1   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    3. ANS: D   PTS: 1   DIF: Moderate   REF: 4.2 Circumference of a Circle
        LOC: 7.SS1   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    4. ANS: A   PTS: 1   DIF: Moderate   REF: 4.2 Circumference of a Circle
        LOC: 7.SS1   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    5. ANS: A   PTS: 1   DIF: Moderate   REF: 4.2 Circumference of a Circle
        LOC: 7.SS1   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    6. ANS: B   PTS: 1   DIF: Moderate   REF: 4.3 Area of a Parallelogram
        LOC: 7.SS2   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    7. ANS: C   PTS: 1   DIF: Moderate   REF: 4.3 Area of a Parallelogram
        LOC: 7.SS2   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    8. ANS: C   PTS: 1   DIF: Easy   REF: 4.4 Area of a Triangle
        LOC: 7.SS2   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
    9. ANS: A   PTS: 1   DIF: Moderate   REF: 4.4 Area of a Triangle
        LOC: 7.SS2   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
  10. ANS: A   PTS: 1   DIF: Moderate   REF: 4.4 Area of a Triangle
        LOC: 7.SS2   TOP: Shape and Space (Measurement)   KEY: Problem-solving Skills
  11. ANS: A   PTS: 1   DIF: Moderate   REF: 4.5 Area of a Circle
        LOC: 7.SS1|7.SS2 TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge

SHORT ANSWER

  12. ANS:
      32 m

      PTS: 1   DIF: Moderate   REF: 4.3 Area of a Parallelogram
      LOC: 7.SS2   TOP: Shape and Space (Measurement)   KEY: Procedural Knowledge
  13. ANS:
      Area of large pizza: 1018 cm^2
      Area of medium pizza: 707 cm^2
      Difference in area: 311 cm^2

      PTS: 1   DIF: Moderate   REF: 4.5 Area of a Circle
      LOC: 7.SS1|7.SS2 TOP: Shape and Space (Measurement)   KEY: Problem-solving Skills

PROBLEM

  14. ANS:
      Radius of hot tub: $5.4 \div 2 = 2.7$

Area of hot tub: $\pi \times (2.7)^2 \doteq 22.9$
Radius of hot tub and deck: $2.7 + 2.2 = 4.9$
Area of hot tub and deck: $\pi \times (4.9)^2 \doteq 75.4$
Area of deck: $75.4 - 22.9 = 52.5$
The area of the deck is about 52.5 m^2.

PTS: 1   DIF: Difficult   REF: 4.5 Area of a Circle
LOC: 7.SS1|7.SS2   TOP: Shape and Space (Measurement)   KEY: Communication