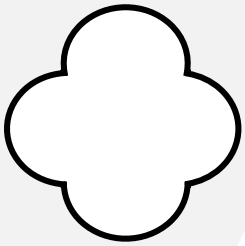
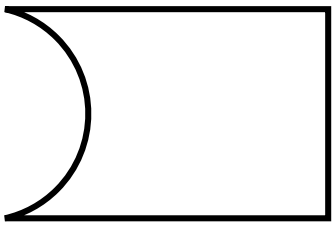
46. How to calculate the perimeter of compound shapes

Scenario Questions: Round answers to 2 decimal places, use π = 3.14

1. A garden consists of a square with side length 4 meters and a semicircle with diameters of 4 meters attached to of its sides. Find the total perimeter of the garden.



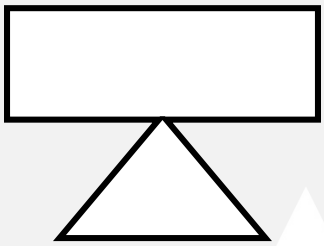
2. A bathroom floor is in the shape of a rectangle with dimensions 6 feet by 8 feet, and there is a semi-circular bathtub with a radius of 3 feet cut out of one of 6 foot sides. Calculate the total perimeter of the bathroom floor.



46. How to calculate the perimeter of compound shapes

Scenario Questions: Round answers to 2 decimal places, use π = 3.14

3. An amusement park ride has a triangular base with side lengths of 6 meters, 6 meters, and 7 meters. On top of the triangular base, there is a rectangular shape measuring 4 meters by 8 meters. Determine the total perimeter of the ride.

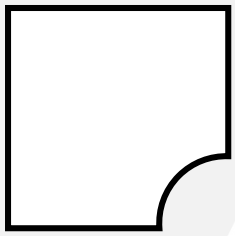


4. A swimming pool has a rectangular shape with dimensions 10 feet by 20 feet. Inside the pool, there is a circular spa with a radius of 4 feet. Find the total perimeter of the pool and spa complex.

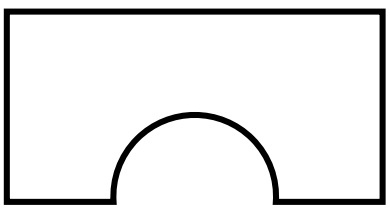
46. How to calculate the perimeter of compound shapes

Scenario Questions: Round answers to 2 decimal places, use π = 3.14

5. A playground has a square area with sides measuring 12 meters, and there is a quarter -circle sandbox with a radius of 3 meters located at one corner of the square. Calculate the total perimeter of the playground.



6. A park consists of a rectangular field measuring 14 yards by 20 yards. Within the field, there is a semi - circular pond with a radius of 5 yards. Determine the total perimeter of the park.



46. How to calculate the perimeter of compound shapes

Scenario Questions: Round answers to 2 decimal places, use π = 3.14

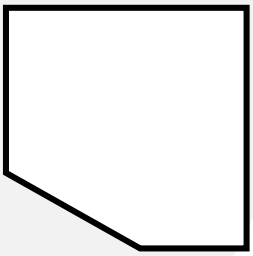
7. A hiking trail has a rectangular segment measuring 8 kilometers by 4 kilometers, and there is a triangular section with a base of 6 kilometers and a sides of 5 kilometers attached to one side. Find the total perimeter of the train.

8. A football field has a rectangular shape measuring 90 meters by 120 meters, with a semicircular arc at each end of the field. Each arc has a radius of 45 meters. Calculate the total perimeter of the football field.

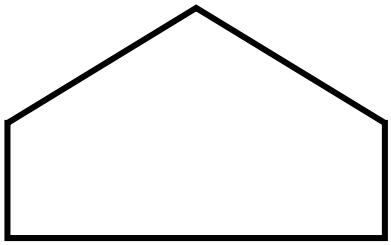
46. How to calculate the perimeter of compound shapes

Scenario Questions: Round answers to 2 decimal places, use π = 3.14

9. A building rooftop has a square shape measuring 15 feet on each side, with a right angle triangle with sides 3 feet, 4 feet and 5 feet cut out from one corner. Determine the total perimeter of the rooftop area.



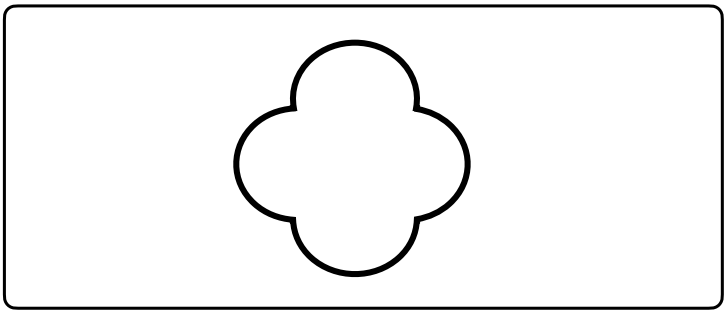
10. A shopping complex has a rectangular building measuring 40m by 60m. There is also a triangular courtyard which runs the full length of the 60m side with the other two sides at 50m each. Find the perimeter of the shopping complex.



46. How to calculate the perimeter of compound shapes

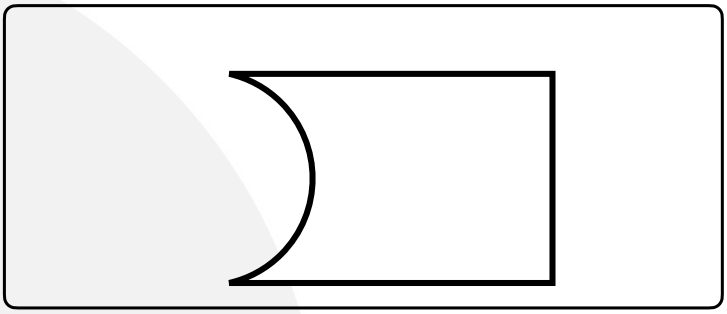
Scenario Questions: Answers

1. A garden consists of a square with side length 4 meters and a semicircle with diameters of 4 meters attached to of its sides. Find the total perimeter of the garden.



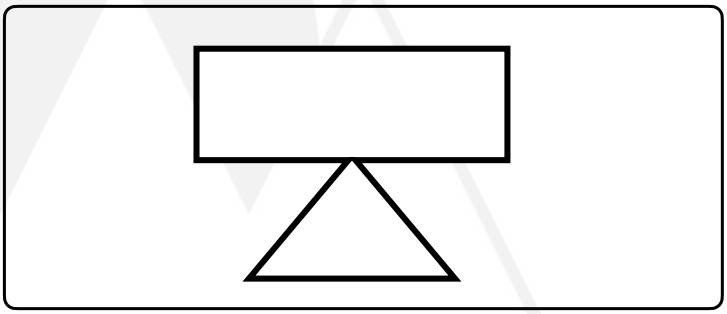
1. Total perimeter = 6.28 m + 6.28 m + 6.28 m + 6.28 m = 25.12 m

2. A bathroom floor is in the shape of a rectangle with dimensions 6 feet by 8 feet, and there is a semi-circular bathtub with a radius of 3 feet cut out of one of 6 foot sides. Calculate the total perimeter of the bathroom floor.



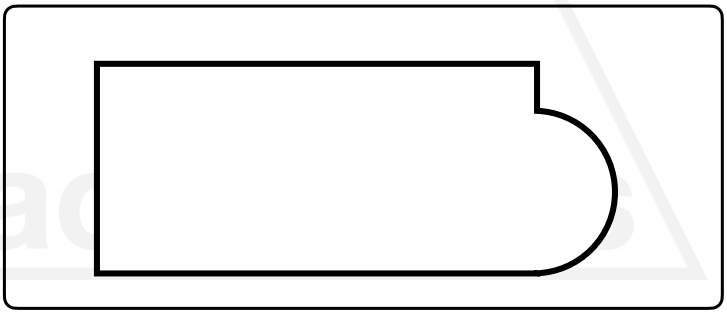
2. Total perimeter = 8 feet + 8 feet + 6 feet + 9.42 feet = 31.42 feet

3. An amusement park ride has a triangular base with side lengths of 6 meters, 6 meters, and 7 meters. On top of the triangular base, there is a rectangular shape measuring 4 meters by 8 meters. Determine the total perimeter of the ride.



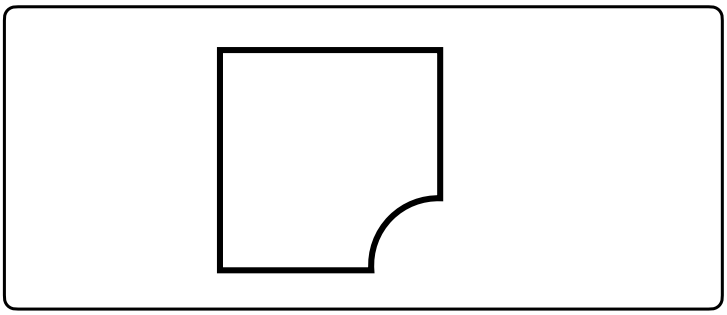
3. Total perimeter = 6 m + 6 m + 7 m + 4 m + 4 m + 8 m + 8 m = 43 m

4. A swimming pool has a rectangular shape with dimensions 10 feet by 20 feet. Inside the pool, there is a circular spa with a radius of 4 feet. Find the total perimeter of the pool and spa complex.



4. Total perimeter = 20 ft + 10 ft + 20 ft + (10 ft - 8 ft) + 12.56 ft = 64.56 ft

5. A playground has a square area with sides measuring 12 meters, and there is a quarter -circle sandbox with a radius of 3 meters located at one corner of the square. Calculate the total perimeter of the playground.

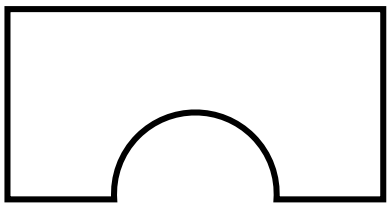


5. Total pertmeter = 12 m + 12 m + (12 m - 3 m) + (12 m - 3 m) + 4.71 = 46.71 m

46. How to calculate the perimeter of compound shapes

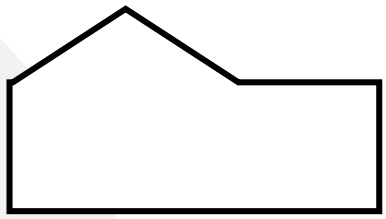
Scenario Questions: Answers

6. A park consists of a rectangular field measuring 14 yards by 20 yards. Within the field, there is a semi - circular pond with a radius of 5 yards. Determine the total perimeter of the park.



6. Total perimeter = 14 yd + 20 yd + 14 yd + (20 yd - 10 yd) + 15.7 yd = 73.7 yd

7. A hiking trail has a rectangular segment measuring 8 kilometers by 4 kilometers, and there is a triangular section with a base of 6 kilometers and a sides of 5 kilometers attached to one side. Find the total perimeter of the train.

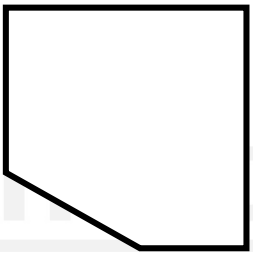


7. Total perimeter = 4 km + 8 km + 4 km + 5 km + 5 km + (8-6) km = 28 km

8. A soccer field has a rectangular shape measuring 90 meters by 120 meters, with a semicircular arc at each end of the field. Each arc has a radius of 45 meters. Calculate the total perimeter of the soccer field.

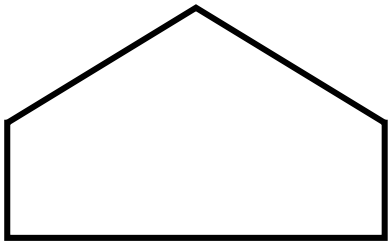
8. Total perimeter = 120 m + 120 m + 151.3 mm + 141.3 m = 522.6 m

9. A building rooftop has a square shape measuring 15 feet on each side, with a right angle triangle with sides 3 feet, 4 feet and 5 feet cut out from one corner. Determine the total perimeter of the rooftop area.



9. Total perimeter = 15 ft + 15 ft + (15 ft - 3 ft) + 5 ft + (15 ft - 4 ft) = 58 ft

10. A shopping complex has a rectangular building measuring 40m by 60m. There is also a triangular courtyard which runs the full length of the 60m side with the other two sides at 50m each. Find the perimeter of the shopping complex.



10. Total perimeter = 40 m + 60 m + 40 m + 50 m + 50 m = 240 m