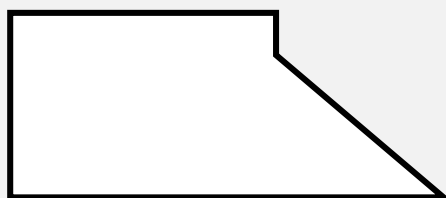


45. How to calculate the area of compound shapes



Scenario Questions: Round answers to 2 decimal places, use $\pi = 3.14$

1. Bob's backyard is shaped like a rectangle with a triangular section at one end. If the rectangle has a length of 8 m and a width of 6 m, and the triangular section has a base of 4 m and a height of 5 m, what is the total area of his backyard?



2. Lucy's garden has a rectangular flowerbed in the middle, and two triangular patches on either side. The flowerbed has a length of 10 m and a width of 5 m. Each patch has base 4 m and height 7 m. What is the total area of her garden?

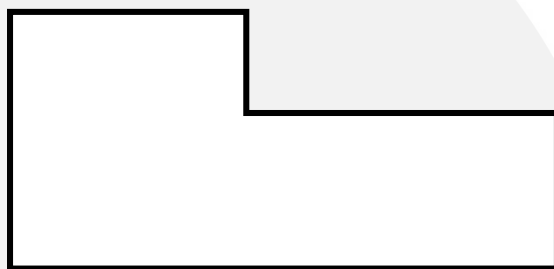


45. How to calculate the area of compound shapes



Scenario Questions: Round answers to 2 decimal places, use $\pi = 3.14$

3. Maria has a house with L-shaped rooms. One section of the room is rectangular with dimensions 4 meters by 5 meters, and the other section is a rectangle with dimensions 3 meters by 6 meters. What is the total area of the room?



4. Ben's football field is made up of a rectangle with a semi-circle at one end. If the rectangle has a length of 80 m and a width of 50 m, and the semi-circular section has a diameter that matches the width, what is the total area of the field?

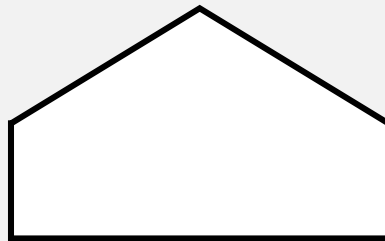


45. How to calculate the area of compound shapes



Scenario Questions: Round answers to 2 decimal places, use $\pi = 3.14$

5. Emma's park has a rectangular playground area with a triangular section alongside. The playground has dimensions 20 m by 15 m, and the triangular section has a base of 20 m and a height of 8 m. What is the total area of the park?



6. Jack has a swimming pool that is rectangular with a semi-circle at one end. The rectangular part has a length of 12 meters and a width of 6 meters, and the semi-circle has a radius of 3 meters. What is the total area of Jack's swimming pool?

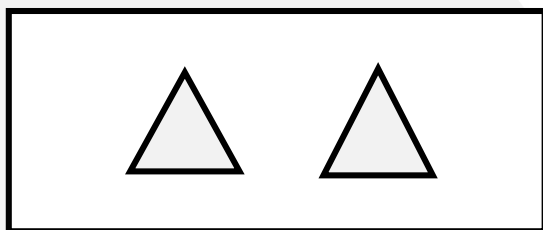


45. How to calculate the area of compound shapes

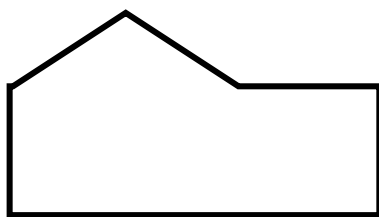


Scenario Questions: Round answers to 2 decimal places, use $\pi = 3.14$

7. Sarah's garden is a rectangular lawn, with two triangular flowerbeds centre. The lawn has a length of 10 m and a width of 8 m. Each triangular flowerbed has a base of 2 m and a height of 1.5 m. What is the total area of Sarah's lawn?



8. Jason has a house with a rectangular bedroom and a triangular balcony. The bedroom has dimensions 6 m by 4 m, and the triangular balcony has a base of 3 m and a height of 1.5 m. What is the total area of Jason's room and balcony?

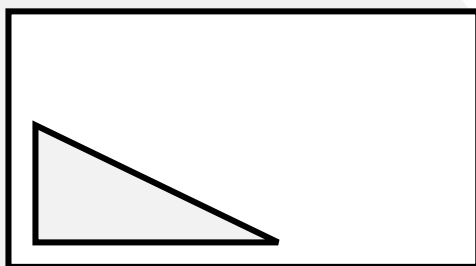


45. How to calculate the area of compound shapes

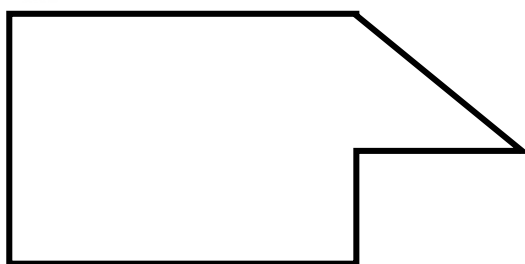


Scenario Questions: Round answers to 2 decimal places, use $\pi = 3.14$

9. Emily's backyard is made up of a rectangular grass section with a triangular pool in one corner. The rectangular section has dimensions 12m by 8m, and the pool has a base of 6 m and a height of 4 m. What area of Emily's backyard is grass?



10. Noah's school has a rectangular classroom with a triangular storage area. The rectangular classroom has dimensions 10 m by 6 m, and the storage area has a base of 4 m and a height of 3m. What is the total area of Noah's classroom?

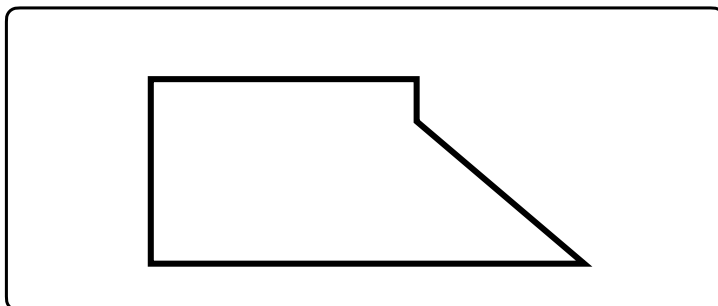


45. How to calculate the area of compound shapes



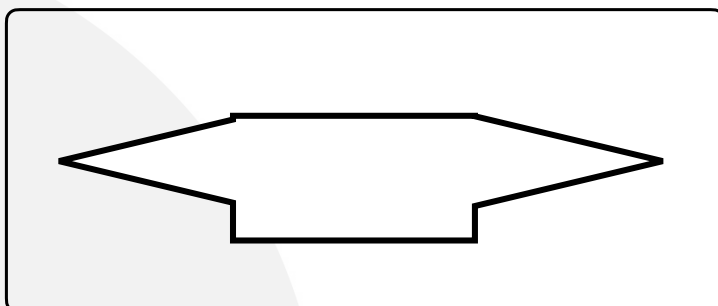
Scenario Questions: **Answers**

1. Bob's backyard is shaped like a rectangle with a triangular section at one end. If the rectangle has a length of 8 meters and a width of 6 meters, and the triangular section has a base of 4 meters and a height of 5 meters, what is the total area of his backyard?



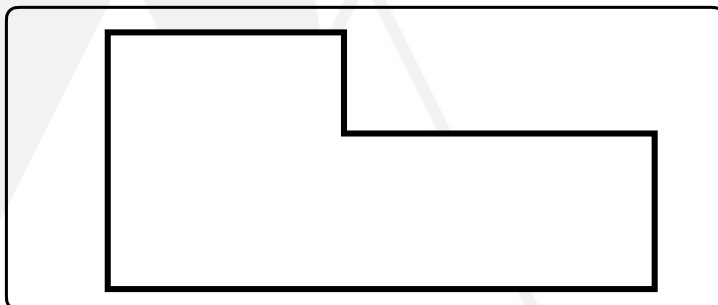
$$1. \text{ Total area} = 48 \text{ m}^2 + 10 \text{ m}^2 = 58 \text{ m}^2$$

2. Lucy's garden has a rectangular flowerbed in the middle, and two triangular patches on either side. The rectangular flowerbed has a length of 10 meters and a width of 5 meters. Each triangular patch has a base of 4 meters and a height of 7 meters. What is the total area of her garden?



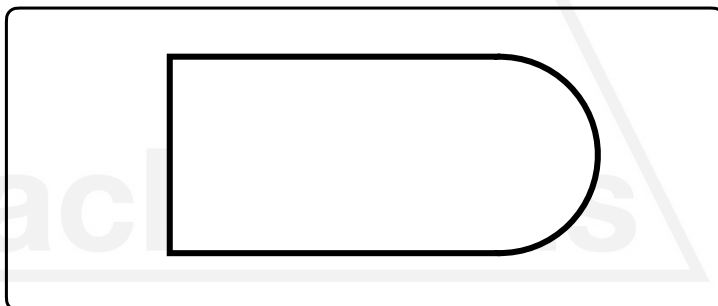
$$2. \text{ Total area} = 50 \text{ m}^2 + 14 \text{ m}^2 + 14 \text{ m}^2 = 78 \text{ m}^2$$

3. Maria has a house with L-shaped rooms. One section of the room is rectangular with dimensions 4 meters by 5 meters, and the other section is a rectangle with dimensions 3 meters by 6 meters. What is the total area of the room?



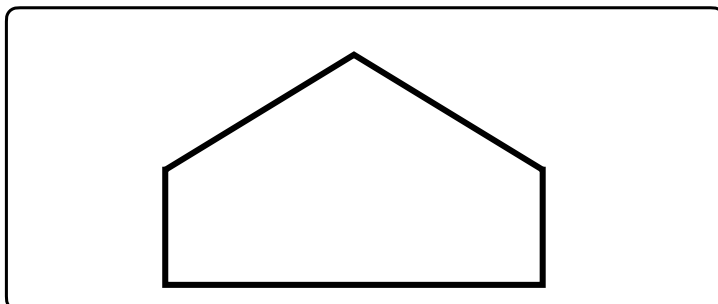
$$3. \text{ Total area} = 20 \text{ m}^2 + 18 \text{ m}^2 = 38 \text{ m}^2$$

4. Ben's soccer field is made up of a rectangular field with a semi-circular section at one end. If the rectangular field has a length of 80 meters and a width of 50 meters, and the semi-circular section has a diameter that matches the width, what is the total area of the field?



$$4. \text{ Total area} = 4,000 \text{ m}^2 + 981.25 \text{ m}^2 = 4,981.25 \text{ m}^2$$

5. Emma's park has a rectangular playground area with a triangular section alongside. The rectangular playground area has dimensions 20 meters by 15 meters, and the triangular section has a base of 20 meters and a height of 8 meters. What is the total area of the park?



$$5. \text{ Total area} = 300 \text{ m}^2 + 80 \text{ m}^2 = 380 \text{ m}^2$$

45. How to calculate the area of compound shapes



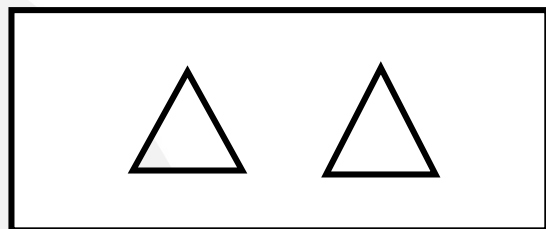
Scenario Questions: **Answers**

6. Jack has a swimming pool that is rectangular with a semi-circle at one end. The rectangular part has a length of 12 meters and a width of 6 meters, and the semi-circle has a radius of 3 meters. What is the total area of Jack's swimming pool?



$$6. \text{ Total area} = 72 \text{ m}^2 + 14.13 \text{ m}^2 = 86.13 \text{ m}^2$$

7. Sarah's garden is a large rectangular lawn, with two triangular flowerbeds in the centre. The rectangular lawn has a length of 10 meters and a width of 8 meters. Each triangular flowerbed has a base of 2 meters and a height of 1.5 meters. What is the total area of Sarah's garden?



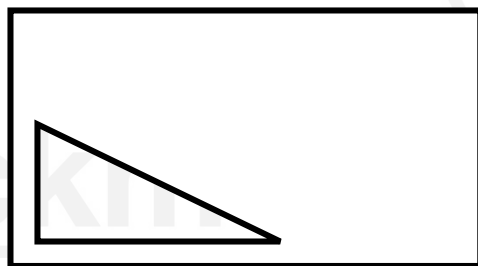
$$7. \text{ Total area} = 80 \text{ m}^2 - 1.5 \text{ m}^2 - 1.5 \text{ m}^2 = 77 \text{ m}^2$$

8. Alex has a house with a rectangular bedroom and a triangular balcony. The rectangular bedroom has dimensions 6 meters by 4 meters, and the triangular balcony has a base of 3 meters and a height of 1.5 meters. What is the total area of Alex's room and balcony?



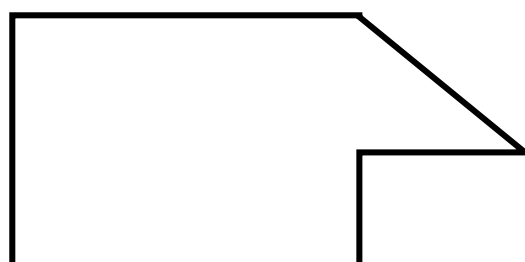
$$8. \text{ Total area} = 24 \text{ m}^2 + 2.25 \text{ m}^2 = 26.25 \text{ m}^2$$

9. Emily's backyard is made up of a rectangular grass section with a triangular pool in one corner. The rectangular section has dimensions 12 meters by 8 meters, and the triangular pool has a base of 6 meters and a height of 4 meters. What area of Emily's backyard is in grass?



$$9. \text{ Total area} = 96 \text{ m}^2 - 12 \text{ m}^2 = 84 \text{ m}^2$$

10. Noah's school has a rectangular classroom with a triangular storage area attached to one corner. The rectangular classroom has dimensions 10 meters by 6 meters, and the triangular storage area has a base of 4 meters and a height of 3 meters. What is the total area of Noah's classroom?



$$10. \text{ Total area} = 60 \text{ m}^2 + 6 \text{ m}^2 = 66 \text{ m}^2$$