2.91 Perimeter and Area of Compound Shapes: 30-minute Pack

Total Marks

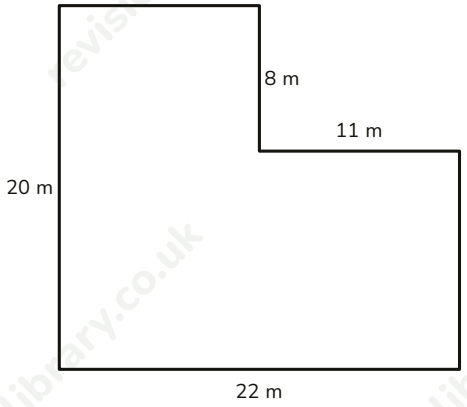
GL ASSESSMENT GL-11PLUS-MATHS · Calculators not allowed · about 30 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A garden bed is made from a rectangle 22 m by 20 m with a rectangular corner 11 m by 8 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

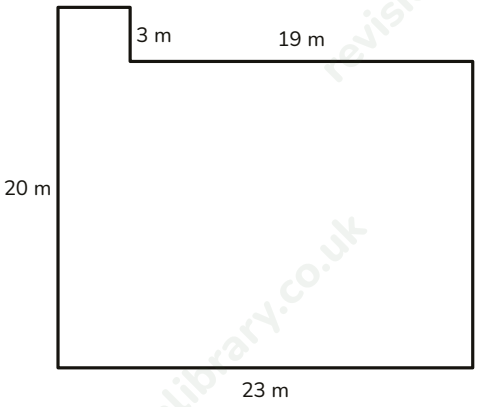


- ☐ A) 132 m²
- ☐ B) 88 m²
- ☐ C) 352 m²
- ☐ D) 440 m²
- ☐ E) 353 m²

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2 A garden bed is made from a rectangle 23 m by 20 m with a rectangular corner 19 m by 3 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

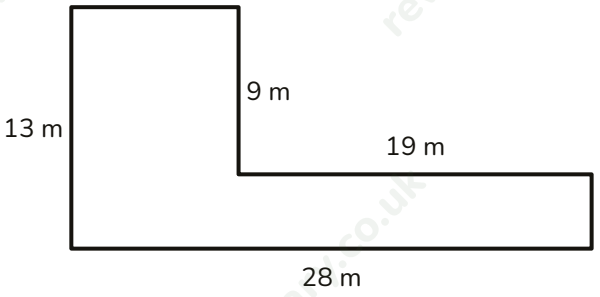


- [ ] A) 42 m
- [ ] B) 130 m
- [ ] C) 64 m
- [ ] D) 87 m
- [ ] E) 86 m

---

3 A classroom floor is made from a rectangle 28 m by 13 m with a rectangular corner 19 m by 9 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

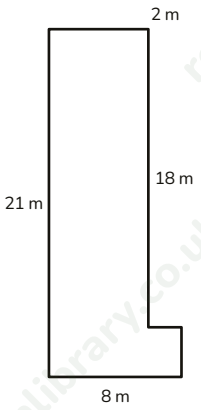


- [ ] A) 364 m²
- [ ] B) 193 m²
- [ ] C) 36 m²
- [ ] D) 171 m²
- [ ] E) 26 m²

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4 A classroom floor is made from a rectangle 8 m by 21 m with a rectangular corner 2 m by 18 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

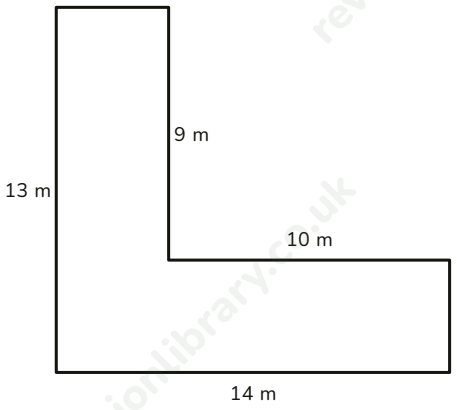


- [ ] A) 98 m
- [ ] B) 18 m
- [ ] C) 58 m
- [ ] D) 132 m
- [ ] E) 59 m

---

5 A patio is made from a rectangle 14 m by 13 m with a rectangular corner 10 m by 9 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

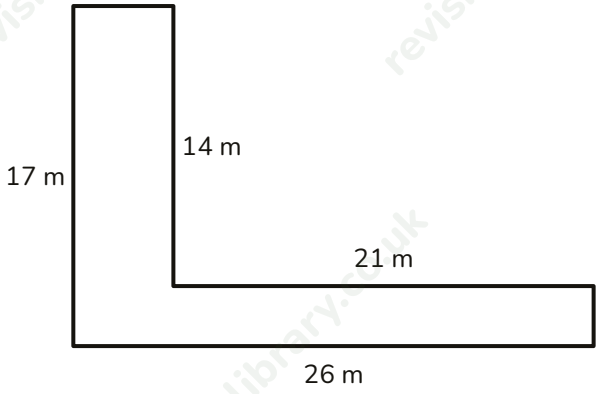


- [ ] A) 54 m
- [ ] B) 16 m
- [ ] C) 92 m
- [ ] D) 73 m
- [ ] E) 53 m

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6 A garden bed is made from a rectangle 26 m by 17 m with a rectangular corner 21 m by 14 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

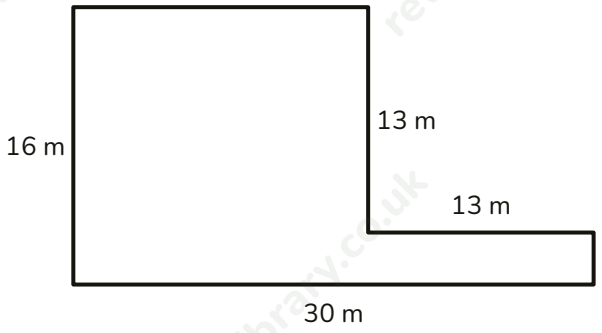


- ☐ A) 149 m²
- ☐ B) 294 m²
- ☐ C) 736 m²
- ☐ D) 148 m²
- ☐ E) 442 m²

---

7 A patio is made from a rectangle 30 m by 16 m with a rectangular corner 13 m by 13 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

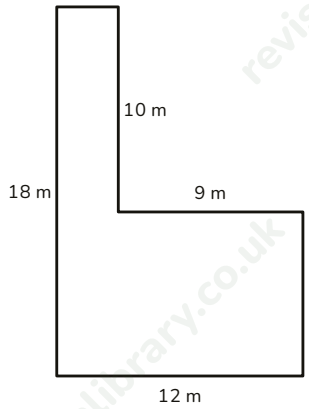


- ☐ A) 169 m²
- ☐ B) 40 m²
- ☐ C) 480 m²
- ☐ D) 649 m²
- ☐ E) 311 m²

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8 A garden bed is made from a rectangle 12 m by 18 m with a rectangular corner 9 m by 10 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

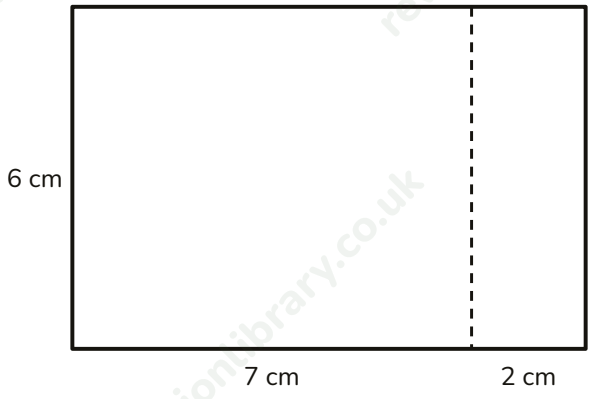


- ☐ A) 59 m
- ☐ B) 60 m
- ☐ C) 22 m
- ☐ D) 98 m
- ☐ E) 126 m

---

9 A rectilinear tile layout consists of a 7 cm by 6 cm rectangle and a 2 cm by 6 cm rectangle placed end to end (sharing the 6 cm side). What is the total area in cm^2?

Diagram NOT accurately drawn

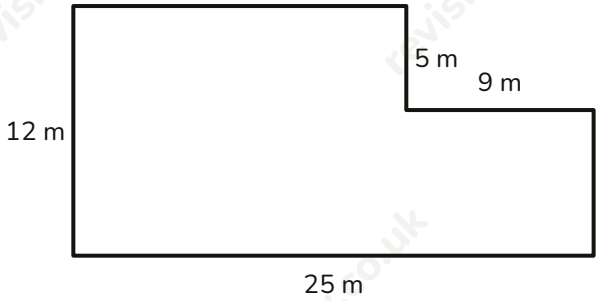


- ☐ A) 36 cm^2
- ☐ B) 54 cm^2
- ☐ C) 42 cm^2
- ☐ D) 60 cm^2
- ☐ E) 24 cm^2

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10 A stage is made from a rectangle 25 m by 12 m with a rectangular corner 9 m by 5 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

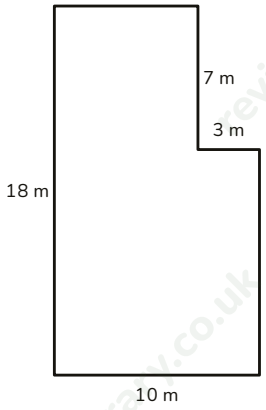


- [ ] A) 60 m
- [ ] B) 75 m
- [ ] C) 74 m
- [ ] D) 46 m
- [ ] E) 102 m

---

11 A stage is made from a rectangle 10 m by 18 m with a rectangular corner 3 m by 7 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

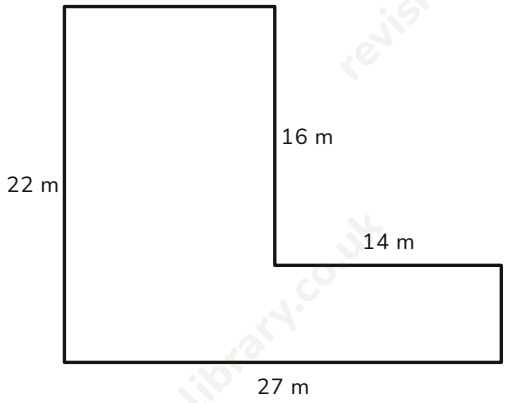


- [ ] A) 180 m²
- [ ] B) 21 m²
- [ ] C) 158 m²
- [ ] D) 159 m²
- [ ] E) 77 m²

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12 A patio is made from a rectangle 27 m by 22 m with a rectangular corner 14 m by 16 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

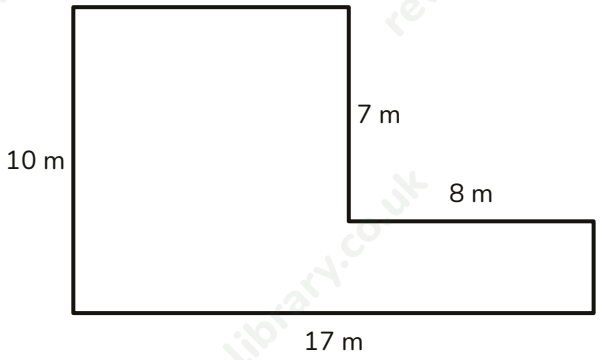


- ☐ A) 99 m
- ☐ B) 97 m
- ☐ C) 158 m
- ☐ D) 38 m
- ☐ E) 98 m

---

13 A classroom floor is made from a rectangle 17 m by 10 m with a rectangular corner 8 m by 7 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

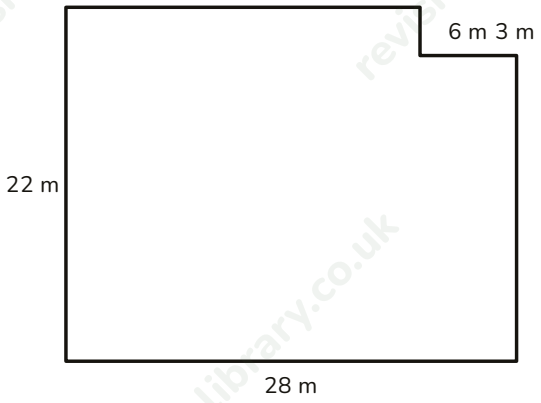


- ☐ A) 84 m
- ☐ B) 69 m
- ☐ C) 54 m
- ☐ D) 24 m
- ☐ E) 53 m

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14 A classroom floor is made from a rectangle 28 m by 22 m with a rectangular corner 6 m by 3 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

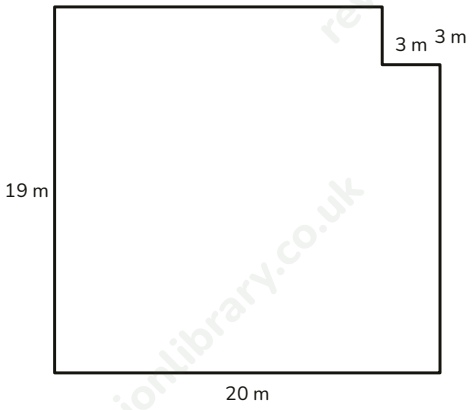


- ☐ A) 598 m²
- ☐ B) 616 m²
- ☐ C) 18 m²
- ☐ D) 82 m²
- ☐ E) 418 m²

---

15 A classroom floor is made from a rectangle 20 m by 19 m with a rectangular corner 3 m by 3 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

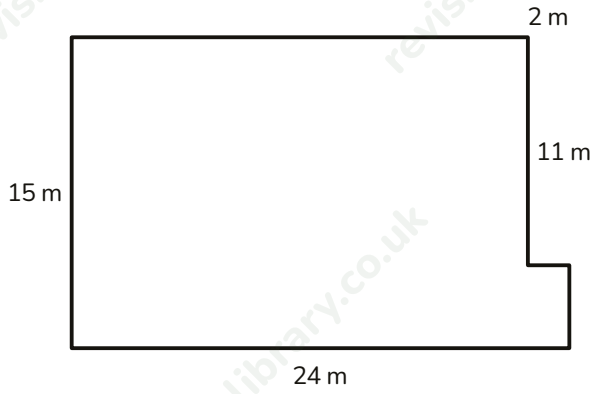


- ☐ A) 371 m
- ☐ B) 72 m
- ☐ C) 66 m
- ☐ D) 78 m
- ☐ E) 90 m

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16 A patio is made from a rectangle 24 m by 15 m with a rectangular corner 2 m by 11 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

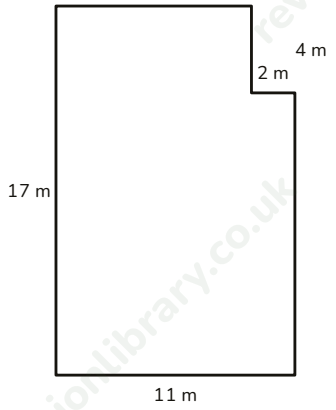


- ☐ A) 22 m²
- ☐ B) 338 m²
- ☐ C) 382 m²
- ☐ D) 360 m²
- ☐ E) 52 m²

---

17 A patio is made from a rectangle 11 m by 17 m with a rectangular corner 2 m by 4 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

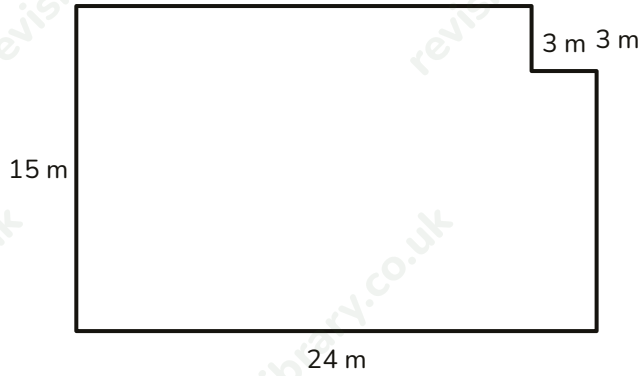


- ☐ A) 180 m²
- ☐ B) 179 m²
- ☐ C) 187 m²
- ☐ D) 44 m²
- ☐ E) 8 m²

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18 A garden bed is made from a rectangle 24 m by 15 m with a rectangular corner 3 m by 3 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

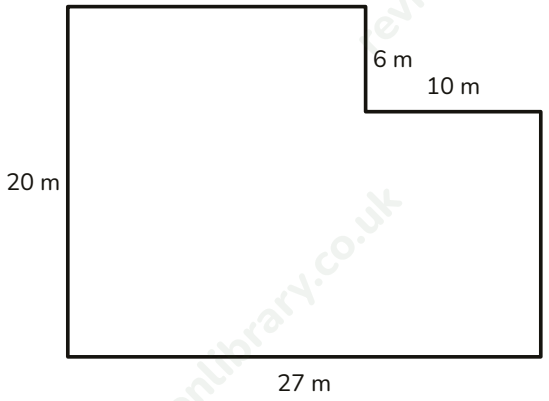


- ☐ A) 360 m²
- ☐ B) 9 m²
- ☐ C) 351 m²
- ☐ D) 352 m²
- ☐ E) 350 m²

---

19 A stage is made from a rectangle 27 m by 20 m with a rectangular corner 10 m by 6 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

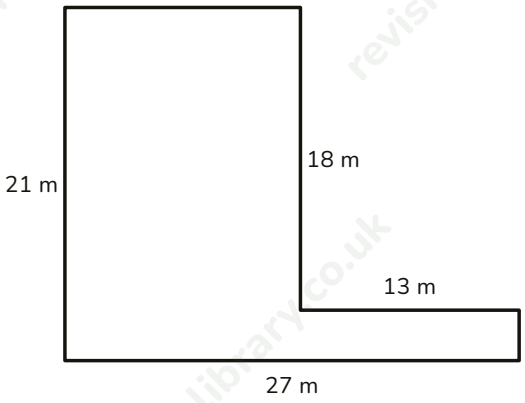


- ☐ A) 480 m²
- ☐ B) 238 m²
- ☐ C) 60 m²
- ☐ D) 540 m²
- ☐ E) 481 m²

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20 A patio is made from a rectangle 27 m by 21 m with a rectangular corner 13 m by 18 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

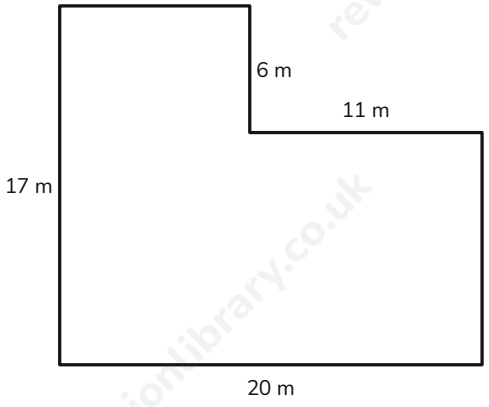


- ☐ A) 234 m²
- ☐ B) 567 m²
- ☐ C) 801 m²
- ☐ D) 332 m²
- ☐ E) 333 m²

---

21 A stage is made from a rectangle 20 m by 17 m with a rectangular corner 11 m by 6 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

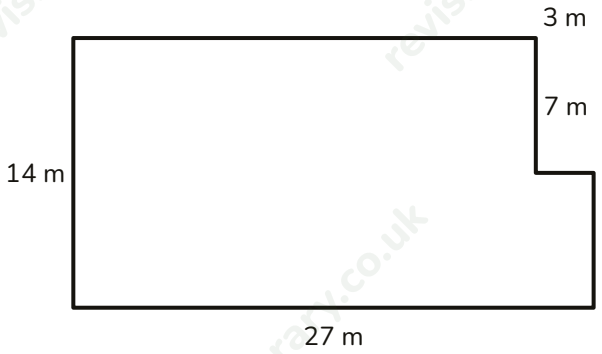


- ☐ A) 406 m²
- ☐ B) 274 m²
- ☐ C) 273 m²
- ☐ D) 340 m²
- ☐ E) 66 m²

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22 A stage is made from a rectangle 27 m by 14 m with a rectangular corner 3 m by 7 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

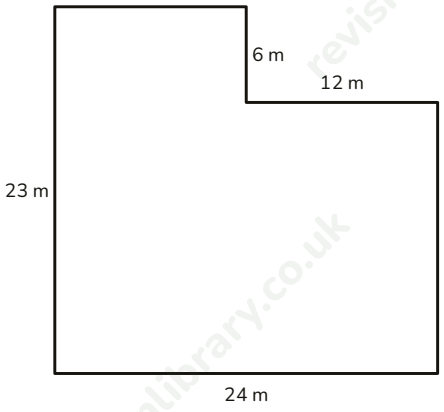


- ☐ A) 357 m²
- ☐ B) 378 m²
- ☐ C) 168 m²
- ☐ D) 21 m²
- ☐ E) 399 m²

---

23 A classroom floor is made from a rectangle 24 m by 23 m with a rectangular corner 12 m by 6 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

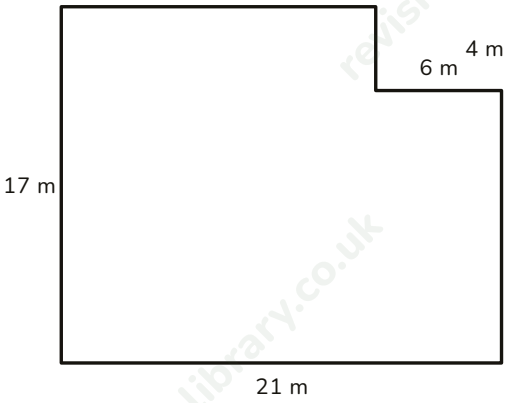


- ☐ A) 552 m²
- ☐ B) 624 m²
- ☐ C) 481 m²
- ☐ D) 72 m²
- ☐ E) 480 m²

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24 A garden bed is made from a rectangle 21 m by 17 m with a rectangular corner 6 m by 4 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

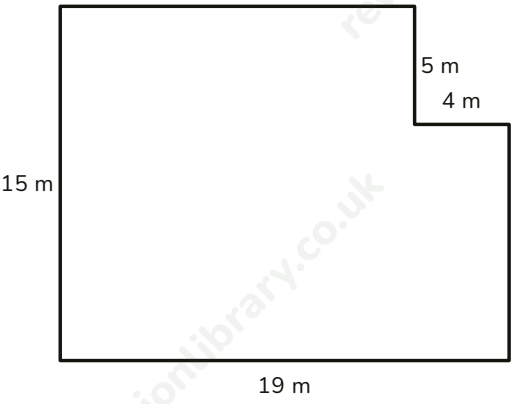


- [ ] A) 66 m
- [ ] B) 96 m
- [ ] C) 76 m
- [ ] D) 56 m
- [ ] E) 86 m

---

25 A garden bed is made from a rectangle 19 m by 15 m with a rectangular corner 4 m by 5 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

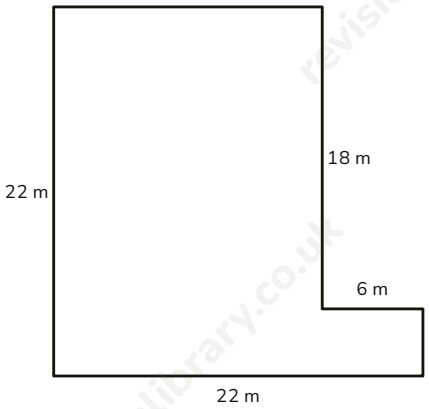


- [ ] A) 50 m
- [ ] B) 86 m
- [ ] C) 68 m
- [ ] D) 265 m
- [ ] E) 69 m

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26 A garden bed is made from a rectangle 22 m by 22 m with a rectangular corner 6 m by 18 m removed, leaving an L-shape. What is the area of the L-shape?

Diagram NOT accurately drawn

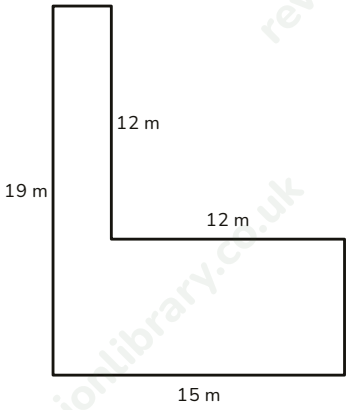


- ☐ A) 484 m²
- ☐ B) 64 m²
- ☐ C) 108 m²
- ☐ D) 377 m²
- ☐ E) 376 m²

---

27 A garden bed is made from a rectangle 15 m by 19 m with a rectangular corner 12 m by 12 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

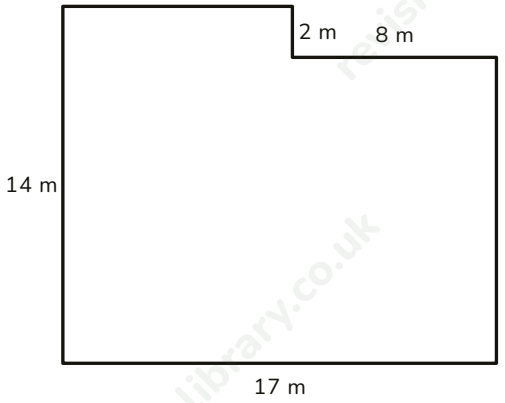


- ☐ A) 69 m
- ☐ B) 68 m
- ☐ C) 141 m
- ☐ D) 116 m
- ☐ E) 20 m

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28 A stage is made from a rectangle 17 m by 14 m with a rectangular corner 8 m by 2 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

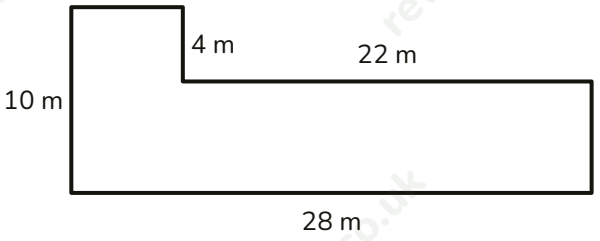


- [ ] A) 62 m
- [ ] B) 63 m
- [ ] C) 82 m
- [ ] D) 42 m
- [ ] E) 72 m

---

29 A garden bed is made from a rectangle 28 m by 10 m with a rectangular corner 22 m by 4 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn

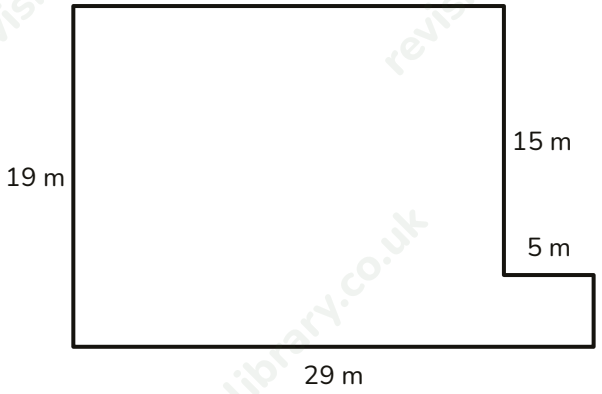


- [ ] A) 102 m
- [ ] B) 75 m
- [ ] C) 128 m
- [ ] D) 76 m
- [ ] E) 24 m

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30 A classroom floor is made from a rectangle 29 m by 19 m with a rectangular corner 5 m by 15 m removed, leaving an L-shape. What is the perimeter of the L-shape?

Diagram NOT accurately drawn



- ☐ A) 95 m
- ☐ B) 56 m
- ☐ C) 96 m
- ☐ D) 136 m
- ☐ E) 76 m

---

31 The perimeter of a rectilinear shape is 54 cm. The side lengths around the shape in order are 8 cm, x cm, 6 cm, 3 cm, 10 cm, 5 cm, 4 cm and 8 cm. Work out the value of x.

(2)

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Mark scheme · 2.91 Perimeter and Area of Compound Shapes: 30-minute Pack

Question 1

correct option C (352 m²) cao **B1**

Answer: C) 352 m²

Question 2

correct option E (86 m) cao **B1**

Answer: E) 86 m

Question 3

correct option B (193 m²) cao **B1**

Answer: B) 193 m²

Question 4

correct option C (58 m) cao **B1**

Answer: C) 58 m

Question 5

correct option A (54 m) cao **B1**

Answer: A) 54 m

Question 6

correct option D (148 m²) cao **B1**

Answer: D) 148 m²

Question 7

correct option E (311 m²) cao **B1**

Answer: E) 311 m²

Question 8

correct option B (60 m) cao **B1**

Answer: B) 60 m

Question 9

correct option B (54 cm²) cao **B1**

Answer: B) 54 cm^2

Question 10

correct option C (74 m) cao **B1**

Answer: C) 74 m

Question 11

correct option D (159 m²) cao **B1**

Answer: D) 159 m²

Question 12

correct option E (98 m) cao **B1**

Answer: E) 98 m

Question 13

correct option C (54 m) cao **B1**

Answer: C) 54 m

Question 14

correct option A (598 m²) cao **B1**

Answer: A) 598 m²

Question 15

correct option D (78 m) cao **B1**

Answer: D) 78 m

Question 16

correct option B (338 m²) cao **B1**

Answer: B) 338 m²

Question 17

correct option B (179 m²) cao **B1**

Answer: B) 179 m²

Question 18

correct option C (351 m²) cao **B1**

Answer: C) 351 m²

Question 19

correct option A (480 m²) cao **B1**

Answer: A) 480 m²

Question 20

correct option E (333 m²) cao **B1**

Answer: E) 333 m²

Question 21

correct option B (274 m²) cao **B1**

Answer: B) 274 m²

Question 22

correct option A (357 m²) cao **B1**

Answer: A) 357 m²

Question 23

correct option E (480 m²) cao **B1**

Answer: E) 480 m²

Question 24

correct option C (76 m) cao **B1**

Answer: C) 76 m

Question 25

correct option C (68 m) cao **B1**

Answer: C) 68 m

Question 26

correct option E (376 m²) cao **B1**

Answer: E) 376 m²

Question 27

correct option B (68 m) cao **B1**

Answer: B) 68 m

Question 28

correct option A (62 m) cao **B1**

Answer: A) 62 m

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Question 29

correct option D (76 m) cao **B1**

Answer: D) 76 m

Question 30

correct option C (96 m) cao **B1**

Answer: C) 96 m

Question 31

Write equation: 8 + x + 6 + 3 + 10 + 5 + 4 + 8 = 54 or sum known then x = 54 - sum known **M1**

x = 10 cm cao **A1**

Answer: x = 10 cm (sum known 44; 54 - 44 = 10).

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