

Chapter 1 BLM Answers

BLM 1-2 Chapter 1 Warm-Up

Section 1.1

- Example: 6 feet 6 inches
- Example: 3 metres
- Example: 27 inches
- 15 in.
- 30 m

Section 1.2

- 12 in.²
- 240 mm²
- 84 ft²
- 113 in.²
- 254 m²

Section 1.3

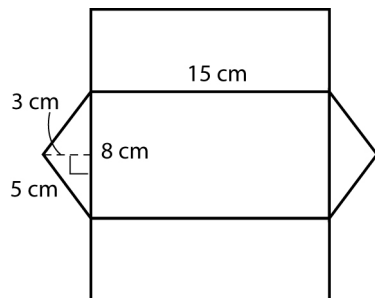
- Example: 12 in.
- Example: 7 cm
- Example: 7 ft
- Example: 9 m
- Example: 144 cm²

Section 1.4

- 62 ft²
- 17 000 cm²
- 294 ft²
- 448 cm²
- 553 cm²

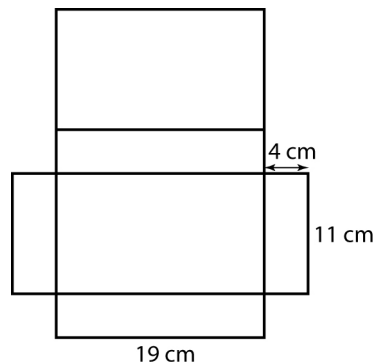
BLM 1-5 Section 1.1 Extra Practice

- a) 70 in.² b) 48 cm² c) 168 mm²
- a) Example:



- 294 cm²
- a) 452 in.² b) 113 cm²
- a) Canadian province: mi²; cell phone screen: in.²; kitchen floor: ft²; football field: yd²
- a) ceramic tile: cm²; backyard: m²; provincial park: km²; smart phone key: mm²
- a) 91 ft² b) 41.4 mm²
- a) 13 104 in.² b) 0.414 cm²
- a) 47 cm b) 50 in.

8. a) Example:



- 658 cm²
- a) 16 in.² b) 35 in.²

BLM 1-6 Section 1.2 Extra Practice

- Examples: a) $1\frac{1}{2} \text{ ft} \times 2 \text{ ft} = 3 \text{ ft}^2$
- $1\frac{1}{2} \text{ ft} \times 2 \text{ ft} = 3 \text{ ft}^2$
- They are the same.
- Examples: a) $50 \text{ cm} \times 60 \text{ cm} = 3000 \text{ cm}^2$
- $46 \text{ cm} \times 61 \text{ cm} = 2806 \text{ cm}^2$
- The estimate is 194 cm² greater than the calculation.
- Examples: a) $20 \text{ cm} \times 25 \text{ cm} = 500 \text{ cm}^2$
- $21 \text{ cm} \times 26 \text{ cm} = 546 \text{ cm}^2$
- The calculation is 46 cm² greater than the estimate.
- Example: 80 cm²
- Examples:
 - $4(2 \times 0.75 \text{ m} \times 2 \text{ m}) = 12 \text{ m}^2$
 - 2
 - $4(2 \times 0.76 \text{ m} \times 2.03 \text{ m}) = 12.3 \text{ m}^2$
 - The calculation is 0.3 m² greater than the estimate.
 - $4(2 \times 3 \text{ ft} \times 6 \text{ ft}) = 144 \text{ ft}^2$
 - 1
 - $4\left(2 \text{ ft} \times 2\frac{1}{2} \text{ ft} \times 6\frac{2}{3} \text{ ft}\right) = 133\frac{1}{3} \text{ ft}^2$
 - The estimate is $10\frac{2}{3} \text{ ft}^2$ greater than the calculation.
- a) 1 ft² b) 0.25 ft² or $\frac{1}{4} \text{ ft}^2$ c) 4 ft²
- 1 m² e) 0.25 m² f) 4 m²
- Examples: a) 6 in.² b) 288 in.²
- 18 in.² d) 40 in.² e) 24 in.²
- Examples: a) 40 cm² b) 1800 cm²
- 120 cm² d) 250 cm² e) 150 cm²
- Examples: a) 900 ft² b) 300 ft²
- 24 ft²



10. Examples: **a)** 100 m^2 **b)** 30 m^2
c) 2 m^2
 11. Example: 5 in.^2
 12. Example: 900 cm^2

BLM 1-7 Section 1.3 Extra Practice

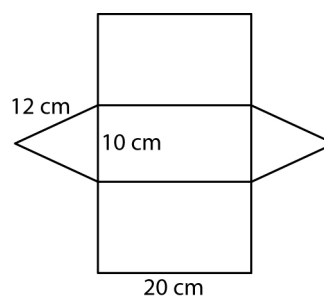
1. **a)** $11\,100 \text{ cm}^2$ **b)** 72 ft^2
 2. **a)** 7080 in.^2 **b)** 5988 in.^2 **c)** 42 ft^2
 3. **a)** 1 in.^2 **b)** 6 in.^2 **c)** 24 in.^2 **d)** No
 4. **a)** 816 m^2 **b)** 300 in.^2
 5. **a)** 1536 m^2 ; No **b)** 480 in.^2 ; No
 6. 126 cm^2
 7. **a)** 112 cm^2 **b)** 868 in.^2
 8. 3124 mm^2
 9. **a)** 220 cm^2 **b)** 99 in.^2
 10. 4.5 ft^2

BLM 1-8 Section 1.4 Extra Practice

1. **a)** 13 cm **b)** 5 in.
 2. **a)** 78.5 cm^2 **b)** 28.3 in.^2
 3. **a)** 204.2 cm^2 **b)** 47.1 in.^2
 4. **a)** 282.7 cm^2 **b)** 75.4 in.^2
 5. 9.43 in.^2
 6. 52.28 cm^2
 7. **a)** 452.38 in.^2 **b)** 530.93 mm^2
 8. 277.59 in.^2
 9. **a)** 1662 cm^2 **b)** 1039 cm^2 **c)** 623 cm^2

BLM 1-9 Chapter 1 Test

1. **a)**



- b)** 790 cm^2
 2. 7.1 m^2
 3. **a)** 56.5 m^2 **b)** 70.7 m^2
 4. **a)** rectangular prism: shoe box
b) triangular prism: glass prism
c) cylinder: oil drum
d) cube: sugar cube
 5. **a)** 2304 square feet
b) 6 gallons; 0.24 gallons
 6. Example: An estimate for the sphere's surface area is 4800 ft^2 . An estimate for the cone's surface area is 1500 ft^2 .
 7. **a)** two spheres and a cylinder
b) Example: The spheres have a diameter of about $\frac{1}{4}$ in. The cylinder has a length of about 2 in. and a diameter of about $\frac{1}{16}$ in.
c) Example: 0.8 in.^2

